Clinical Demonstrations OF PHTHISIS.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton,

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LECTURE IV.

GENTLEMEN,—I beg your careful attention to-day to the modifications of phthisis which take place from fibroid alterations in the lung and pleura. They lend a decided stamp and character to those forms of disease in which they prevail, and are among the most important of the agents which modify and prolong the progress of the affection. They are therefore of the highest interest in prognosis, and their clinical recognition is an essential to accuracy. I must decline to assign the name "fibroid phthisis" to any one variety of the disease, for there is no such idiopathic affection to be met with in practice; while, on the other hand, I hope to show that every chronic form of lung disease may become modified and shaped, so to speak, by an over-development of fibrous tissue. In speaking of the pathology of phthisis, I pointed out that the adenoid tissue of the lung, which surrounds the vessels and bronchi and is found between the lobules, becomes increased and hardened, grows under irritation, and thus compresses the alveoli, contributing to their obliteration, and also strangles the minute bronchioles and bloodvessels, interfering both with the nutrition of the lung and with the direct supply of air to the seat of disease. You will remember how the fibrous tissue is also subpleural, in which position it also is capable of overgrowth from irritation. But overgrowth is not its only character; for in progress of time it shows its power of *contractility*, so that lessened volume of the lung results, and even a diminished pleural cavity. On those two characters of primary *overgrowth* and secondary *contractility* depend many of the physical changes in all chronic structural diseases of the lung and pleura. For remember that this fibrous contractile tissue is spread like a net throughout the lung, enveloping its vessels, extending along every ramification of bronchi and pulmonary arteries, and is in direct communication with the lining of the lung, and in pleuritic cases with the chest-walls themselves. The alterations in the chest-walls, from mere flattening of small portions of the chest to the contracted side with shoulder dragged down and fixed, are therefore mainly due to those toughened fibrous bands gradually binding and compressing an organ which was originally elastic and free to play in a cavity the walls of which underwent momentarily the most complex yet free movements of expansion and return. Inspect a healthy chest, and you are struck with the beauty and freedom of its play; while the eye can detect at a glance even a portion of the parietes where the alveoli have collapsed and the fibrous element has been developed and has commenced its contracting and limiting power over the chest movements. Now, first, let me impress upon you that the changes which the lung undergoes in this hyper-development of fibrous contractile tissue are of *various origin* but of *one import*. Of various origin—for pneumonia, bronchitis, pleurisy, and tubercle can all give rise to fibroid lung; but of one import—for wherever you see a somewhat advanced condition of the contracted lung you may be sure that nature is attempting prolongation and cure, and that chronicity is likely to be the stamp of the affection. Remember also that the *acute* lung affections, pneumonia and tuberculosis, are the only ones in which we do not find fibrous changes. Where rapid resolution of disease-products is possible, or where continuous destructive changes throughout every tissue of the lung are inevitable, there you have no fibroid formations. The chronic conservative changes in cases of old disease of the lung and pleura are intimately and necessarily associated with fibroid development, and this element is the active opponent of extension. Only remember the normal state of a lung, exquisitely elastic, permeated by countless air-currents, the seat of a double circulation, delicately balanced in an air-tight cavity in which the utmost freedom of play is secured by a pellucid and smoothly oiled membrane, and conceive what would be the consequence to its tissues and its functions if, when a portion is blocked, all the air and vascular supplies were to have their usual access to the diseased part, and its movement to remain unrestrained. We can enumerate easily the important effects of a hyper-development of a fibrous contractile tissue. It lessens the air and blood supply; walls round the diseased product; limits the movements of that portion of lung, and ties it down through the pleura to the chest-walls. It thus guards against hæmoptysis and against pneumothorax, lines and circumscribes cavities, and shuts up the injured portion of lung. There is no case of chronic disease of the lung in which fibroid changes do not occur, and you will now apprehend my reasons for declining to recognise "fibroid" as a distinct variety of phthisis. I shall describe to you the most characteristic form of modification of old phthisis which fibrous change affords; but you will remember that you are looking at an old phthisis all the time, and not at a new disease.

Let us take, then, a well-marked specimen of fibroid alterations in the living subject, and consider its *characters, symptoms,* and *pathology*.

You will find a patient, generally beyond the age at which phthisis is most prevalent, who has had a chronic cough perhaps for years. He has had all the symptoms of phthisis of a protracted kind: gradual but slow marasmus, hæmoptysis, febrile attacks with long remissions. And when you first see him in these wards, he is perhaps free from any of the more urgent symptoms, for his temperature may be normal, his cough moderate, and his digestion unimpaired. He complains most of dyspnœa. Most generally he has no hereditary predisposition to phthisis; but if you examine into his history, you will find that either he was the subject of pleurisy or of pneumonia in an acute or subacute form, or his occupation had been dusty—i. e., he had worked in a mill or factory, or been a stonemason or a collier; for dusty occupations, which help to impact the lung mechanically, produce this form of phthisis. Watching your patient for months, as we do here, you will discover in him a certain immunity from the common events of phthisis, as spreading destruction of lung, copious hæmoptysis, diarrhœa, night-sweats. He remains, in fact, pretty stationary in our wards, and does our treatment little credit; while he does not, on the other hand, slip down into the hopeless condition of marasmus with fever. If you examine him in the final stage of all, you observe that he becomes exhausted by gradually impaired sanguification or by intercurrent disease of the opposite lung, which had remained sound for many years. Now strip and examine him, and what do you find? You are struck at once with the contraction of one side, flattening and retraction of the walls to a considerable extent, and of course lessened movements. The affection then is unilateral, and, curiously enough, it is by far most commonly seen on the left side (in 31 instances out of 39). Examine more carefully, and you will find that not only is the lung contracted, but the adjacent parts are displaced. The heart is perhaps drawn up to the extent of two inches, or it is drawn round into the back part of the left axilla, as in the patient in Eldon ward. Should the affection be right-sided (the rarer form), you may have the heart's apex beyond the right nipple; the diaphragm is drawn up on the affected side, leaving a hollow under the ribs; and the opposite lung will be found expanded across the middle line, and often beyond the left margin of the sternum in left-sided cases.

These alterations of position are of great interest, and assist both your diagnosis and prognosis, for they help to establish the contractile nature of the lung changes, and such cases have on them the stamp of chronicity. The changes are due to positive retraction of the diseased lung itself, to necessarily lessened movements and diminished volume of one-half of the chest, and to atmospheric pressure. Such cases are of great importance in studying the physiology of the chest movements. By inspection alone, then, and palpation, you will have derived a great deal of information about your patient. From *percussion*

you will further learn that there are patches of induration in various parts of the lung, perhaps at the base or middle of the lung at the back. Percussion of course will also show that the opposite healthy lung has been drawn over. The whole side is also duller than the opposite, but it is very dull around the base or in certain parts. *Auscultation* will show you that over these dull parts there are sounds indicating cavity, loud blowing with perhaps resonant voice, and even pectoriloquy with gurgle or cough. Pathologically we know that these signs may mean *dilated bronchi* or *cavities* in the ordinary sense. These excavations or enlarged tubes are found about the base or middle of the lung. They may be due to the ordinary extending ulceration of the lung or to a portion of indurated tissue breaking up, and very often to the death or gangrene of a portion of lung, whose nutrient vessels have in fact become strangled. As regards the dilated bronchi, they are caused by a loss of elasticity of the tubes and by a softening of the lung-tissue around them. Under such conditions the shock of cough, when often repeated, would produce dilatation of a portion of a bronchial tube. It has been noticed that pneumonia occurs in patches around these dilatations, and, indeed, the whole history of "fibroid" cases seems to be that of an indurating pneumonia in repeated attacks, and perhaps that variety which has been called "catarrhal" most commonly gives rise to this form of disease. You will notice that the matters expectorated are often pigmented, blackish or green, and occasionally fetid and gangrenous. Lung-tissue will be found when microscopically examined.

The pathological examination of these cases gives, as you may expect, a contracted indurated lung, of a dark greyish-marbled colour. Its tissue is hard and pigmented, and obliterated tubes or vessels traverse it in pale lines. The bronchi are often dilated so as to resemble cavities. Cavities there are, too, formed out of cheesy masses and destruction of lung-tissue, just in the ordinary way of phthisical cavities. These cavities are well-lined with a membrane, and are themselves traversed by bands representing the strangled débris of vessels and bronchioles. They undergo contraction too, and, if small, may finally close, presenting that puckered appearance of cicatrices with which you are familiar. The alveolar walls are thickened by fibrous growth, and the air-cells are often obliterated. It is rare to find during life any true vesicular breath-sounds in such a lung, for the element of elasticity has been lost, and the organ is in time reduced to a hardened tough mass, permeated by bronchial tubes, in parts dilated into cavities. The pleura is commonly thickened and adherent both to the lung and the walls of the chest, and dense interlobular bands extend from it through the lung.

In tracing the origin of this condition you will find but little evidence that it has a single starting-point, but much confirmatory evidence that it has various beginnings. It is very commonly seen after pleurisy, whether with or without effusion, in the earlier stages. Patients recover of course every day from an effusion of moderate extent, which may be rapidly absorbed, and leaves a slightly contracted side with resulting adhesions.

An inflammatory condition of both lung and pleura (pleuro-pneumonia, as it is called) is a more common cause; and should that block of lung be of a nature not easily liquefied and absorbed, it remains as a nucleus of fibroid degeneration. In considering pneumonia you will remember that I pointed out that if a hepatised or solidified lung does not resolve after the second month, the case is likely to pass into the phase of fibroid degenerative changes, and then all the features are gradually developed which render it undistinguishable from chronic phthisis. You will have indurated patches of lung, with dulness, tubular breath-sounds and voice, proceeding to formation of one or more cavities or dilated bronchi, and the patient will emaciate, have febrile accesses and hæmoptysis. When you see such a case, with such physical signs more evident about the base and middle of the back part of the lung, and with progressively contracting side, you call it "fibroid lung" in modern terms; but is it not really a phthisis? Those who advocate the unity and idiopathic character of this affection point to its being left-sided and unilateral, and assert that it may be so distinguished. But in time the opposite lung will get affected, and in many instances it is a right-side disease.

Again, tubercle properly so called will undoubtedly originate this form, and when retrogressive, as opposed to the progressive, the ordinary events of softening do not take place. The result is very commonly fibroid degeneration, with all the characters which I have described. Indurating pneumonia and pneumonic patches around tubercle are not to be distinguished by the scalpel or the microscope, and a combination of true fibroid changes with tubercle is daily seen in our autopsies. In the single limited cavity, with collapse of chest-walls, we have fibroid changes well marked in the lining and covering of the cavity, in the obliterated vessels crossing it, and in the interlobular thickenings around it. It is only in acute tuberculosis, with universal impaction of grey tubercle, or in the rapidly ulcerative phthisis, that you notice the entire absence of fibrous changes. *Bronchitis* is a less common origin of fibroid changes, but it is observed in children and others; in the former after pertussis or rubeola, when collapse of a portion of lung is apt to occur, followed by contractile fibroid proliferation. These phenomena may have modern names, but if you like to study the early observers you will find that they were not unnoticed by Laennec, who described the dilatation of bronchi and the tough fibrous state of lung around tubercular cavities. Andral described the inflammatory thickening and ultimate contraction of the lung; while the "cirrhosis" of Corrigan, and the "melanosis" of Bayle, referred to a like condition, only under varied forms. Corrigan's "cirrhosed" lung cases had cavities and ulcerated intestines, and other phenomena of phthisis. We must not then dispute about names, especially in this difficult transition period of pathology, but let us be careful observers of facts. It is remarkable that the greater number of these cases of fibroid change occur in *males*, and that the *age* of the patients is generally greater than in ordinary progressive phthisis.

The *diagnosis* of these cases is not difficult. The displacement of the heart and liver, and expansion of the opposite lung, may be due to other causes than fibroid change. In effusions into the pleura the heart is displaced to the opposite chest of the chest; in fibroid it is drawn to the affected side, or drawn up. Again, in effusion the side is enlarged, and the intercostal spaces are prominent. The opposite conditions prevail in fibroid changes, and the liver is depressed in right-sided effusion, but drawn up (as is the diaphragm) in fibroid. The viscera are not commonly displaced in cancer of the lung, and the side is not contracted. The situation of the dulness, which is not unilateral, but crosses the middle line, and encroaches irregularly on the parts lying about the mediastinum, is characteristic of this disease, and not observed in fibroid phthisis. There is a curious condition of the ends of the fingers and toes called clubbing, which is intimately associated with fibroid change. I show you here the cast of a hand taken from life. The fingers are enormously expanded at the ends, somewhat like the "clubs" on playing cards. This is not merely a thinning of the upper parts of the fingers, which spares their extremities, but it is a new growth; it is, in fact, a growth of fibro-cellular tissue, and in some cases there is hypertrophy of the bones of the phalanges. You have here fibroid growth under your eye. Trousseau associated it with cyanosis and adherent pericardium, and so it is found; but in this hospital I have proved its connexion with chronic phthisis and fibroid changes in the lung. It seems to be a result of lowered nutrition and imperfect arterialisation of blood, and a direct growth of fibro-cellular tissue. In 46 of my own cases, 30 were in the cavity stage of phthisis, and only 4 in that form of diffused deposit scattered through the lung, and causing slight flattening only of the walls. It is, therefore, a character of chronic phthisis undergoing fibroid changes. Out of 2430 cases of phthisis of all stages, 654 (or 27 per cent.) had clubbed fingers. Of these 29 per cent. were males, and 24 per cent. were females. The observed *duration* of my cases while under observation was forty-five months, as compared with fifteen months, the duration (under observation) of ordinary phthisis. *Clubbing* is therefore a visible sign of chronicity.

For practical purposes let us note now the *conservative* effects of fibroid changes in the lung. They tend to contraction and induration, producing an inert condition of lung; they reduce the volume of one pleural cavity and contract any existing excavation. A reduction of the volume of blood, both of pulmonary and bronchial origin, circulating in the lung, is effected, and a reduction in the quantity of the

entering and contained air ensues. There is less work for the lung to do in aerating the blood, and less movement of the lung itself. Why is lung-disease so serious, so fatal? Why does the system so suffer by irritative fever in lung affections? You will find the answer to this if you consider the constant movement, the double circulation, the enormous supply of blood, and the vital nature of the function of respiration. If you desired to give the lung rest, as you treat a wound, or a fractured limb, or an inflamed eye, you would stop or control all this movement, and lessen the supply of blood and of air. Fibroid change does precisely this. Nature might restore an ulcerated lung if rest were secured, especially when the cheesy matter had degenerated, dried up, or been expectorated. Suppose we could tie up a pulmonary artery, compress bronchial tubes, and limit the expansion of the lung and of the side, the ulcer would be reduced to the condition of a wound in the leg or a lymphatic abscess in the neck, and might heal. At all events Nature shows us the way, and we might second her attempts. You will often find benefit from bandaging the side or strapping it round, and so limiting the movements and circulation.

Study the effects of pressure on the lung, as in pleuritic effusion. Lung disease, if present, generally stops in a lung so compressed; and we occasionally witness in pneumothorax (if life be prolonged) the remarkable event that the ulcerative disease in the collapsed lung is suspended.

Thus fibroid is of varied origin; for out of all forms of lung disease become chronic, Nature tries a mode of escaping the worst results. In a scale of phthisis, the *worst* results are progressive ulceration of all tissues from apex to base; and the *best* results are limit of disease, clearing out of morbid products, narrowing of pulmonary space, and lessening of pulmonary requirements and of pulmonary circulation. Such objects are partially obtained by phthisis of fibroid form: not fibroid phthisis, or fibroid *wasting*, which is a contradiction; but fibroid formation counteracting waste, whether of lung or body.

Clinical Lecture

ON THE

INFLUENCE OF THE SUBCARTILAGINOUS LAYER OF BONE ON THE PROGRESS OF DISEASE.

BY C. MACNAMARA, F.C.U.,

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GENTLEMEN,—In a lecture I delivered not long since on acute osteo-myelitis (THE LANCET, July 8th), I showed you specimens demonstrating the anatomy of the lamina of bone which intervenes between the cancellated structure of the long bones and their articular cartilages. You might have seen that this lamina differs very remarkably from the subperiosteal layer of bone, for it is studded with concretions of calcareous matter in addition to a large quantity of granular earthy material; and passing into it from the medullary spaces contained in the cancellated tissue of the bone, there are a number of processes or villi, which are prolonged up to the attached surface of the articular cartilage, and the vascular and other elements which these canals contain evidently affect the integrity of this latter structure. But, as one of the students remarked the other day, why argue in favour of this layer being anything more than cartilage which has undergone calcareous changes? for on the examination of sections of it which have been soaked in dilute acids, it is evident that the calcareous concretions are deposited in or around cartilage-cells, which cells may be demonstrated after the earthy matter enclosing them has been removed. The reason which would incline me towards the belief that this calcified layer belongs rather to bone than cartilage is, that under the influence of colouring agents it is not stained like cartilage, and, further, the medullary canals are prolonged into it, and round many of these processes the lacunæ and canaliculæ of bone may be clearly defined. But I admit without question that this lamina, and in fact the entire shaft of the long bones, is after all only a modified form of cartilage; for the embryonic cells of the temporary cartilage, from which the larger portion of the shaft of a bone is formed, continue to live within the bone, as I shall subsequently explain to you. A bone is little more than the aggregate work of the individual cartilage-cells, in the same way as a mass of coral is the product of innumerable anthozoa. However, it is not as an histologist that I wish to draw your attention to the subcartilaginous layer of bone, but rather in the hope of fixing your attention on the fact that this calcareous lamina plays a rather important office in various affections of the joints, and also in disease of the soft structures contained in the cancellated tissue of bone.

As an illustration in point we may refer to this specimen, taken from the body of a woman who died from the effects of acute inflammation of the large veins of the right thigh. At the time of her admission into the hospital, the cellular tissue of her right thigh and buttock was literally infiltrated with pus; the femur was in places denuded of periosteum, and the knee-joint distended with putrid matter. The patient died from septic poisoning, and after death we found a large fibrinous clot occupying the right side of her heart, and extending for some distance along the pulmonary arteries. But what we have specially to concern ourselves with is the condition of the lower articular end of the femur, which has been macerating for some time past in the warm putrid pus contained in the knee-joint. Destructive changes have thus been set up in the cartilage covering the articular surface of the femur, and the end of the bone is laid bare. If we examine a section of the denuded bone we notice that the disease going on in the knee-joint has not affected either the subcartilaginous layer of bone or the contents of the processes of medullary matter which it contains; illustrating the fact that under certain circumstances of acute affection of the joints the important elements contained within the cancellated tissue of the adjacent long bones may be protected from destructive changes by means of the modified osseous layer which is situated beneath the articular cartilage. If, in the case now under consideration, the disease in the joint had continued for some time longer, it is quite probable that the hyperaction would have extended to the medulla contained in the subcartilaginous lamina of bone, and the consequence would have been an excessive secretion of bone-earth by its cells, resulting in sclerosis of the part, so that an additional barrier would thus have been formed between the diseased joint and the contents of the cancellated structure of the bone.

It has frequently been remarked, in cases of osteo-sarcoma commencing in the medullary tissue, that the disease may involve the greater portion of the bone, but that it stops short at its articular extremity. You may remember a case sent up from Brighton by Mr. F. W. Butler, in which I removed the scapula, the arm, and half the clavicle, for an osteo-sarcoma growing from these bones. In this case we found that the whole of the scapula, with the exception of the glenoid cavity, was implicated in the disease, the head and neck of the bone presenting a worm-eaten appearance, and on making sections through these parts we discovered that the cancellated tissue of the bone was no longer occupied by healthy medulla, unless, perhaps, immediately external to the subcartilaginous layer of bone; beyond this the remaining cancellated tissue of the neck of the scapula contained elements which could not be distinguished from those of a bone undergoing the process of inflammation, and these structures merged gradually into the fibro-cellular growth which forms the bulk of this large tumour. The round cells of the new growth had, it is true, a brilliant nucleus, and their fibrous stroma was largely developed, but still it appears to me that the tumour was simply a rapid development of elements which in health we find in the medulla. My ideas on this matter may, perhaps, be best illustrated by reference to examples taken from the vegetable kingdom. We know that if the sporules of some fungi are placed under certain circumstances, they

will produce plants differing very remarkably from the fungi grown from the same germs under different conditions; and so with the cellular elements contained within bone—the outcome of their growth will depend not only on their inherent properties, but also upon the conditions of their environment. The nature of the alterations which have taken place in the surroundings of the cells implicated in the diseased structures we are considering is at present beyond our comprehension; nevertheless, it seems to me that our labours should be directed to the circumstances of these changes, in order that we may understand the nature of abnormal growths of this kind. For instance, it is evident that osteo-sarcomatous tumours originating in the medulla destroy the bone in which they grow; at the same time osseous spicula, and often a complete bony skeleton, form within the new growth; the reason of this is that the medulla of the bone is derived directly from the temporary cartilage-cells from which the bone was originally formed; and as the inherent property of the nuclei of these cells is to produce bone, the tendency of its offspring is still to form bone. Bone-cells, in fact, encase themselves in earthy matter derived from the blood, in much the same way as the gelatinous substance of a polyp secretes from the water in which it floats the calcareous envelope by which it becomes surrounded. If we carefully examine a portion of temporary cartilage which is undergoing the process of transformation into bone, we discover that the nuclei of the cartilage-cells along the line of ossification break up into many pieces. Each of these sub-divisions, as it grows, encases itself in a layer of earthy matter; so that after a time the nucleus of a single temporary cartilage-cell, having thrown off a number of offshoots, is transformed into a small lamina of bone, and each portion of the still living nucleus, having become surrounded by a shell or layer of bone earth, is converted into a bone-corpuscle. This is not, however, the history of all the cartilage-cells, otherwise the bone would contain no medullary structure; and, in fact, we notice at the line of ossification that groups of the nuclei of the cartilage-cells, after subdividing and growing, become surrounded by plates of bone formed as above described; spaces produced in this way coalesce with one another, and thus the cancellated tissue is formed.

But, observe, the cancellated structure of bone produced in this way contains in its trabecular network not only the direct descendants of the embryonic cartilage-cells in the form of bone-corpuscles, but innumerable granular corpuscles and compound cells are also to be found in its medullary spaces, which are all derived from the cartilage-cells; and the properties of these cells, or the protoplasm they contain, in its normal condition, is to secrete bone-earth from the blood; and so you can understand how it comes to pass that osteo-sarcomatous tumours which result from perverted action of the medulla, cause the bone from which they spring to disappear. It is not that the tumour in question absorbs the bone; but the osteo-sarcoma is evidence of the abnormal growth of the structure which in health supplies the waste which the bone undergoes in the ordinary course of nature; the medulla and bone-cells under these circumstances, in place of forming bone, grow into a mass such as that I now show you; at the same time, the perverted action of the cells has a tendency to revert to their original function and produce bone, for the nuclei of cartilage-cells are unquestionably amenable to the law by which every organised body develops constantly in accordance with its own tendencies; and hence the formation of the osseous skeleton and detached masses of bone occasionally found scattered throughout these tumours, their fibrous stroma being similar to, and formed in the same manner as, that commonly seen in articular cartilage as a result of irritation.

If I have made myself intelligible, you will perceive how it is that, as in the case of this tumour, the scapula has entirely disappeared with the exception of the head and neck of the bone, but the articular cartilage of the glenoid cavity and the modified plate of bone to which it is attached are unaffected by the disease; because this lamina is a modified form of bone, containing processes, it is true, filled with medulla, but these processes do not pass into the articular cartilage, and therefore the abnormal action affecting the medulla has not as yet extended into the joint. You say there is but little medulla in this layer of bone to be affected by the disease, and this is precisely the idea I hold; the medulla on one side of the subcartilaginous layer of bone is undergoing rapid change, but the articulation on the other side of this lamina is unaffected. This is, therefore, the converse to the example I gave you at the commencement of this lecture; in that case the subcartilaginous layer of bone protected the medulla from deleterious influences going on within the knee-joint, but in the latter instance the same layer of bone was a barrier to the advance of disease along the medulla into the neighbouring articulation.

We may gain some practical hints from a consideration of the circumstances of the subcartilaginous layer of bone, for so long as this lamina remains it is almost impossible for bony anchylosis to occur, for instance, between the extremities of the femur and tibia. In a considerable number of specimens of chronic inflammation of the cancellated tissue of these and other long bones, I have found the calcareous lamina and the trabeculæ in the cancellated tissue of the ends of the bone greatly thickened, so that the medullary structure of one bone has been effectually separated from that of the other bone entering into the formation of the joint. Under these conditions bony anchylosis is almost impracticable; but if the structures intervening between the bone-forming material on both sides of the joint are removed, either by the hand of the surgeon or by means of disease, then bony or fibrous anchylosis may occur according to the proximity of the bones and the amount of motion which takes place between them. It is the existence of this subcartilaginous layer of bone that is apt to prevent the cure of many cases of joint disease by anchylosis. In excising a joint in cases of the kind we not unfrequently have to leave portions of unhealthy osseous structure behind; nevertheless anchylosis now occurs because the medulla of the bones entering into the formation of the joint are brought into apposition. In fact, it is evident, supposing the cancellated tissues of two bones are separated by means of the subcartilaginous layer, that their articular extremities can no more unite than if they were separated by a plate of mica. In addition to this, as I have already remarked, in cases of chronic inflammation, sclerosis of the bone occurs behind the calcareous lamina from hyperaction of the medulla, and so the bone-forming material or medulla is separated from the joint, not only by the subcartilaginous lamina, but also by means of new bone behind it. The same thing occurs in instances of ununited fractures; the medulla in the cancellated structure of the ends of the bones ossifies, and effectually prevents the bone-forming elements from one end of the fracture uniting with those of the other, and so repairing the injury. If we wish to overcome this difficulty we must carefully remove the whole of the sclerosed ends of the bones, and bring the healthy medulla of either bone into apposition, and if we then keep the parts properly at rest we may fairly expect union to occur; but neither pegs inserted into the sclerosed ends of the bone or any other mechanical contrivance can possibly effect the union of an ununited fracture, unless we remove the obstacle which separates the medullary structures of both ends of the bone from coming into proximity and growing together.

Those of you who have been attending the wards of the hospital will have seen cases in which the principles referred to in this lecture have guided us in practice; for in instances of disease both of the ankle and knee-joint occurring in children, we see that by taking away only the articular surfaces of the bones involved recovery from extensive disease by anchylosis has resulted; the epiphyses of the bones have been preserved, and the growth of the limb in length will not have been hindered; lastly, the operation, performed with this object in view, has perhaps been less formidable than in ordinary cases of excision of these large joints.

PRESENTATION.—Dr. A. B. Steele, of Liverpool, has been presented with a handsome silver salver, together with a purse of 100 sovereigns, by his professional brethren in Lancashire and Cheshire, in acknowledgment of his many public services in connexion with the profession. We congratulate Dr. Steele on this very substantial proof of the manner in which his services are appreciated by those with whom he has been associated in several official capacities.

ON GELSEMINUM SEMPERVIRENS.

BY SYDNEY RINGER, M.D.,
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AND
WM. MURRELL, L.R.C.P., M.R.C.S.,
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(*Continued from p. 79.*)

ACTION ON THE CIRCULATION.

We now proceed to the consideration of the influence of gelseminum on the circulation. We made thirty-three series of observations on patients in whom we induced the full toxic effects of the drug. The observations were taken every quarter of an hour whilst the patient was fully under the influence of the gelseminum, and subsequently, as its effects began to decline, at hourly intervals. In twenty-two out of the thirty-three series of observations the pulse remained unaffected in frequency, whilst in the remaining eleven it was quickened, the increase ranging from six to twelve beats in the minute. Curiously enough, even in the same patients, the effects following the administration of gelseminum were variable, for although the pulse would be quickened on some occasions, it would on others remain unaffected. This was not a mere question of dose, for an increase in the quantity administered failed to affect the result. When the patient was fully under the influence of the drug we were inclined to think that the pulse became a little smaller and softer. These observations showed that gelseminum produced little if any effect upon the circulation. The correctness of this conclusion was confirmed by observations on the lower animals.

Dr. Burdon-Sanderson made a kymographic experiment on a rabbit, the result of which he has kindly placed at our disposal. It is not, we think, necessary to enter into any detailed description of the operation. A cannula was inserted into the trachea, and artificial respiration was kept up from the commencement to the conclusion of the experiment. The cannula in connexion with the kymographion was tied in the carotid artery. The tracings were taken at first continuously, and subsequently at intervals of two minutes for a period of ten seconds each. A solution of the gelseminum alkaloid (1 in 20) was used, and this was further diluted with saline solution before being injected into the jugular vein. The quantities administered were:—

At 32 minutes after commencement of experiment,					½ gr.
„ 52	„	„	„	„	½ gr.
„ 66	„	„	„	„	½ gr.
„ 77	„	„	„	„	½ gr.
„ 83	„	„	„	„	½ gr.

The experiment was in every way successful, and the tracings show most conclusively that gelseminum exerts no influence on the blood-pressure.

ACTION ON THE RESPIRATION.

Gelseminum acts less powerfully upon the respiratory centre in man than in the lower animals, or, perhaps, to speak more accurately, we should say that in the human subject other parts of the nervous system are involved before the respiratory tract. Thus, in man, the drug produces giddiness, pain in the head, loss of sight, diplopia, and ptosis, before respiration is in any way affected. The ptosis may be so complete that the eyes cannot be opened, and the sight may be temporarily almost destroyed, and yet the breathing will not be altered in character, or, at all events, will become only slightly more superficial. It may be said that the symptoms we have enumerated may have been overlooked in the lower animals. We, of course, cannot answer for the pain in the head and giddiness, but we are enabled to speak most positively as to the absence of ptosis. We frequently noticed that when an animal was so fully under the influence of the drug as to be on its side in a condition of the most perfect helplessness, it was still able to open its eyes widely and apparently without the slightest effort.

In the lower animals gelseminum, as we have seen, acts first on the respiratory centre, and then on the spinal cord. In man, however, the muscles of the upper eyelids, or more probably their motor nerves, are considerably affected before either the cord or respiratory centre. Moreover, if the cases of poisoning are correctly reported, we are justified in concluding that in man the drug acts upon the spinal cord before it involves the respiratory centre, for in several instances it is recorded that the patient has recovered from a condition of complete paralysis. In our experiments on cats, rabbits, and dogs, we found that the animal died from asphyxia before there was any great impairment of voluntary power.

We thought that it was possible that the respiratory centre was affected in man, but so slightly that it had escaped detection. With the view of solving this point and of comparing the influence of gelseminum on respiration and voluntary power, we made a number of observations on three men. We tested simultaneously their vital capacity by a Mayer and Meltzer's spirometer, and their grasping power by a slight modification of Duchenne's dynamometer. The observations were made hourly for some hours both before and after the administration of the drug. We were especially careful to ascertain that the dynamometer was always grasped in exactly the same way, for the power over this instrument varies considerably according to the mode in which it is held. The following are the results obtained in the first case:—

FIRST CASE.

	Vital capacity. Average.	Muscular strength. Average.
Before drug given	193	89
After 1st dose	209	87
„ 2nd „	207	79
„ 3rd „	205	80

The ordinary symptoms were well marked, the patient after the third dose suffering from diplopia, misty vision, great heaviness of the upper eyelids, and marked weakness of the external rectus, and yet apparently neither the vital capacity nor the grasping power was affected. We will now consider the second and third cases.

SECOND CASE.

	Vital capacity. Average.	Muscular strength. Average.
Before drug given	185	75
After 1st dose, but before symptoms,	217	76
„ 2nd „ „ „	230	67
„ 3rd „ „ „	237	67
„ 4th „ „ „	236	68
„ 5th „ „ „	230	64

THIRD CASE.

	Vital capacity. Average.	Muscular strength. Average.
Before drug given ...	175	87
After 1st dose	175	65
„ 2nd „	190	75
„ 3rd „	185	75

In both cases the symptoms were well marked.

It might be concluded from the last two series of observations that the vital capacity is slightly increased, and the muscular power somewhat diminished, by the administration of gelseminum. We hesitated, however, to accept this conclusion, thinking that by practice the patient acquired greater skill in emptying his chest, and that the apparent increase in the vital capacity was in reality due to this cause. We thought, moreover, that it was not improbable that by the frequent use of the dynamometer the hand became tender, and that this caused an apparent diminution in the contractile power of the muscles of the forearm. We must state, however, that Mr. Pearse, by whom chiefly these experiments were performed, kindly tested his own vital capacity and grasping power hourly from 8.30 A.M. to 6 P.M. without taking any drug, and found that they varied very slightly, the last observation being almost identical with the first. It must be confessed that our methods of testing the vital capacity and muscular strength are not very trustworthy; but at the same time our experiments, we think, show that gelseminum may produce very marked symptoms whilst affecting but slightly either respiration or muscular power.

Gelseminum, as we have already stated, has been highly

praised in the treatment of cough. For practical purposes we recognise three different kinds of cough:—

1. Where the expectoration is free, but the cough is not in excess of the expectoration.

2. Where the power of expectorating is diminished, as in emphysema and fibroid degeneration of the lung. In fibroid degeneration, owing to the great induration and thickening of the pleura, there is little or no expansion, and the air cannot be drawn into the small bronchial tubes behind the mucus, which is consequently not expelled. In these cases, although the expectoration is slight, the cough is often troublesome, and not infrequently very violent.

3. Where there is excessive excitability of the respiratory centre, and a small secretion of mucus consequently suffices to set up violent and frequent cough.

The main object of our treatment is in every case to diminish the secretion of the mucus in the bronchial tubes. This method must be chiefly relied on in the first and second varieties. In the third we must have recourse to the administration of sedatives, and ether, chloroform, opium, and, above all, gelseminum will be found beneficial.

ACTION ON THE MIND AND ON SENSIBILITY.

We have carefully watched for, but have been unable to detect, any influence on the mental faculties. Patients when under the influence of gelseminum look dull and heavy from the drooping eyelids, and often feel sleepy, but when asked if they are conscious of any mental depression they have always answered very decidedly in the negative. Neither is cutaneous sensibility affected by the dose we have administered. We have tested sensibility roughly by pricking the skin and pinching, and also in two cases by the use of the compasses, but were unable to detect any loss of sensation, either in the face or forearm, although the patients to whom we have more especially referred had taken for six consecutive hours drachm doses of the tincture and were fully under the influence of the drug. We were led to pay particular attention to the action of gelseminum on the gums from the success which has attended its administration in neuralgia of these parts.* One patient on both occasions on which we experimented on him complained spontaneously of a numb pain and a little tenderness along the teeth and the edges of the gums of the upper jaw. We have never, however, in any case been enabled to detect, either by pinching or by the use of sharp instruments, any loss of sensation in the parts.

ACTION ON THE TEMPERATURE.

Gelseminum, in the doses in which we have employed it, does not affect the temperature. In the first place we made two sets of observations, both on the same man. On each occasion he took drachm doses of the tincture hourly for four hours, and his symptoms were marked and characteristic. The temperature was taken on one occasion every quarter of an hour, and on the other every half hour or every hour, and the observations lasted respectively five and six hours. In one experiment it rose 0·2° F., and in the other 0·4° F., during the course of the observation. It is true in the evening the temperature fell, but this occurs naturally, and in these cases was probably due to the ordinary diurnal variation. We also tested the effect on the temperature in a little girl aged nine, who was suffering from chorea. On the first day we gave twenty-minim doses of the tincture every hour for three hours, without producing any constitutional effects, and the rectal temperature remained unchanged. On the following day we gave for five hours an hourly dose of respectively forty, thirty, twenty, twenty, and thirty minims, and produced well-marked constitutional effects. The temperature was taken hourly in the rectum, and on two occasions was 0·4° F. lower, but after the fifth dose it was the same as before the medicine was given.

In addition to these observations on patients, we made six temperature experiments on rabbits, but the knowledge we obtained from them was simply *nil*. We soon found—a fact with which we were previously not altogether unacquainted—that in these animals fright exerts a marked influence on the temperature. The mere fact of holding the animal's legs or placing it on its side with the view of introducing the thermometer into the rectum will rapidly reduce the temperature by two degrees. Our conclusions on this point have consequently been drawn entirely from observations on patients.

In this paper we have shown:—

1. That gelseminum produces but little, if any, effect on the pulse.

2. That it does not affect the blood pressure.

3. That in man it probably acts on the respiratory centre less energetically than in the lower animals.

4. That in man it acts on the muscles of the eye, and produces other symptoms before it influences the respiratory centre.

5. That in man it in all probability affects the spinal cord before the respiratory centre.

6. That it exerts no influence on the mind, and none on the cutaneous sensibility.

7. That it does not affect the temperature.

(To be continued.)

* Dr. Wickham Legg, THE LANCET, May, 1873; Dr. Sawyer, of Birmingham, Practitioner, August, 1875; Dr. Spencer Thompson, THE LANCET, November, 1876.

PRIMARY CANCER OF THE LUNGS IN A CHILD FIVE AND A HALF MONTHS OLD.

BY ALEXANDER M. McALDOWIE, M.B.,
HOUSE-SURGEON TO THE ROYAL SURREY COUNTY HOSPITAL.

VOGEL, in his "Diseases of Children," says: "Carcinoma in general is an extremely rare affection in children, and that of the lungs in particular has been observed but a few times. In most instances carcinoma of the lungs was found in the cadaver, along with cancerous deposits in other organs, in the form of white or grayish-white nodules of the most variable sizes." Ebermann gives statistics to show the age most liable to be attacked, and records seventy-two cases, but all occurring after the first year, and only one before the age of nine. Dr. Risdon Bennett, in his Lumleian Lectures on Intrathoracic Cancer, founded his observations on thirty-nine cases, the youngest being eleven years of age. I have been unable to find a case recorded of primary cancer affecting the lungs at the age stated below.

Mrs. W——, aged forty-two, was admitted into the Surrey County Hospital on January 6th, 1876, under the care of Mr. Butler, suffering from a slight attack of broncho-pneumonia, affecting the apex of the right lung. As she was nursing at the time, she brought her child into the hospital with her, but did not state on admission that there was anything the matter with it. Noticing, however, the weakly appearance and pinched features of the child, I was induced to examine it carefully to ascertain the cause, and also to elucidate the nature of the mother's complaint. The mother stated that the child appeared quite strong and healthy when born, but began to lose flesh almost immediately after birth, and continued wasting until admission. She had several other children, but they were all quite healthy. There was no history of phthisis or cancer in the family.

The child, a male, aged five months and a half, did not appear to be larger than an average-sized infant at birth, and was in a state of extreme emaciation, its skin dry, yellow, and wrinkled, its features sallow and shrunken, and its eyes sunken. It was very fretful, although it did not appear to be suffering any pain. It was slightly troubled with a short, dry cough, but there was no dyspnœa. Percussion elicited a clear sound over both lungs. On auscultation nothing was heard beyond feeble breathing, with occasionally a few faint râles.

The little patient lingered for a few days, but died on the 12th January, apparently from exhaustion.

Autopsy, twenty-four hours after death.—The left lung was loaded with hard, white nodules, varying in size from a millet-seed to a large pea, thickly disseminated through its substance. At its root was a hard mass larger than a walnut, occupying the whole thickness of the lung from the root to the costal surface. The pleura pulmonalis and pleura costalis were very much thickened, and were totally united by firm adhesions. The right lung was still more

thickly studded with nodules, which were rather larger than those in the left lung, several of them being half an inch in diameter. The right pleura was quite normal, the white colour of the nodules, which were superficially situated, being apparent through it; these projected from the surface of the lung, their free surfaces being flattened. The pulmonary tissue surrounding the cancerous masses was quite healthy. The bronchial glands were enlarged, hard, and infiltrated. The brain, liver, kidneys, and all the other organs appeared to be quite healthy.

Remarks.—The absence of any family history of cancerous diathesis, the want of physical signs, and the obscurity of the symptoms, render this case of considerable interest apart from its extreme rarity. The absence of dulness is explained by the fact that the air-cells surrounding the nodules were permeable to air, and therefore perfectly resonant on percussion. Moreover, Dr. Beigel states: "The tissues surrounding the cancerous nodules lose their contractility, and would give a tympanitic sound, if its tympanitic character were not injured by the solid nature of the newly-formed nodules." The lack of symptoms indicating extensive disease of the lungs is also accounted for by the normal condition of the lung-substance surrounding the nodules. Dr. Bennett asserts that these nodules push aside the surrounding tissues, and may remain for an indefinite time without exciting inflammation or causing derangement of function. Although in this case some malignant affection was suspected, it was solely from the emaciated and cachectic appearance of the child.

I may add that the mother improved rapidly under treatment, and left the hospital in six weeks almost well.

Guildford.

DESCRIPTION OF A NEW EUSTACHIAN CATHETER.

BY ALEXANDER MORISON, M.B. EDIN.

IT has been truly remarked that the inventive ingenuity of a surgeon in the production of new instruments for old purposes stands, as a rule, in an inverse ratio to his operative dexterity; and my excuse for introducing to the notice of the profession a modification of the Eustachian catheter usually known as Kramer's must rest in the fact that, even after considerable experience in the use of this instrument, and after one has successfully catheterised a given case at one sitting, before hitting the faucial orifice of the Eustachian tube on subsequent occasions time is not unfrequently lost, and the patient's nares and throat are rendered irritable by repeated endeavours to place the catheter in position. To obviate these inconveniences, I have had constructed by Messrs. Arnold and Sons, of West Smithfield, the instrument to be described.

Note.—The woodcut does not illustrate the text aright owing to a blunder on the part of the engraver.—A. M.

The most usual form of silver Eustachian catheter is graduated in inches and eighths of an inch (not a new idea); and about an inch and a half from the dilated end of the tube there is a furrow for the reception of a silver circlet, graduated from 0° to 90°, and having a miniature plumb depending from it to mark the perpendicular. This circlet can be removed and fitted on to any number of catheters constructed with the aforesaid groove. On the same side as the curve of the instrument a spike or indicator springs from the catheter immediately behind the circlet, so that when the instrument is turned into position, by finding the perpendicular with the plumb, the exact angle at which the catheter is placed is indicated upon the graduated circlet. By means of this instrument, therefore, two points are determined—namely, the depth at which the orifice of the Eustachian tube is situated from the external nares, and the number of degrees the catheter has to be revolved in order to enter that orifice. The angle should be taken not merely when air enters the tympanic cavity, as determined by the diagnostic tube, but when it enters in the fullest stream. The above points being noted at a first sitting, one has no difficulty in quickly placing the instrument in position on any subsequent occasion.

I have practically tested the utility of this catheter, and can imagine its proving useful to the expert, and rendering catheterisation of the Eustachian tube a very simple process to those who have less frequently to perform that operation.

Canonbury, N.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

FRACTURE OF THIGH, OF BOTH CONDYLES AND OF THE BODY OF LOWER JAW, AND OF THE THYROID AND CRICOID CARTILAGES; LARYNGITIS; LARYNGOTOMY; PNEUMONIA; DEATH.

(Under the care of Mr. ROYES BELL.)

FOR the notes of this extremely interesting and complicated case we are indebted to Mr. Duncan, surgical registrar.

Thomas W——, aged twenty-five, admitted into Fisk ward, Sept. 11th, 1876, for injuries resulting from a fall. The patient was employed at the New Law Courts. Whilst in the act of stepping from one part of the scaffolding to another, he missed his footing, and fell a distance of thirty feet. He was picked up in a state of insensibility, and brought to the hospital, where it was found that he had sustained a fracture of the thigh, and other injuries. About an hour afterwards he had recovered consciousness somewhat. He was bleeding from the left ear and nose; the pupils were equal, and reacted to light. A long Liston splint was applied temporarily to the thigh. The hæmorrhage from the left ear and nose had ceased at night; that from the ear amounted to about half an ounce. No discharge of serous fluid succeeded the hæmorrhage.

Next day he had completely recovered consciousness, but he could not hear a watch ticking on the left side, even placed close to the ear. The pupils were equal, and reacted to light. Passed urine freely.

There was a deep cut on the point of the chin, extending inwards for about an inch, but not leading down to the lower jaw. There was also a superficial cut on the middle of the lower lip. On looking into the mouth, the lower jaw was seen to be bodily displaced backwards for at least a quarter of an inch behind the upper. There was also a slight lateral displacement to the left side, so that the right central incisor tooth occupied the middle line. The body of the jaw was freely movable on an antero-posterior plane. As the fracture could not be precisely made out, chloroform was administered, and a fracture was found to have occurred through the neck of the lower jaw on the left side. There was marked crepitus here. At the corresponding site on the opposite side, a peculiar crepitus, as if some muscle were interposed between two bony surfaces, was also present. No abnormal movement or crepitus was obtainable through the right half of the body of the bone. No apparent injury to the left external auditory meatus.

The patient had no dyspnœa or hæmoptysis, nor did he complain of pain, or draw any attention to his laryngeal region. Th voice was somewhat husky. The right thigh was fractur at the junction of the middle and lower

thirds. The upper fragment was rotated outwards, whilst the lower was drawn up behind and to the inner side of the upper, so that there was shortening to the extent of an inch and a half; and the upper end of the lower fragment also projected backwards into the ham. A considerable quantity of blood was evidently effused around the ends of the fragments, and there was a slight superficial excoriation of the skin here, but no bruising of the integuments was present.

Temperature on evening of admission 100°; next morning 98·2°; pulse 80. On the 12th the long splint was readjusted, and the normal length of the thigh apparently restored; extension was also kept up by a weight attached to the end of the foot-piece.—At 5.25 P.M. the patient had a rigor lasting fifteen minutes; temperature during the rigor reached 104·4°. He sweated freely afterwards, and was sick four times.

Sept 13th.—There has been a recurrence of bleeding from the left ear to a slight extent. Deafness still continues; no dyspnœa. Feels generally much better. Morning temperature 99·4°; evening 99·2°.

14th.—Morning temperature 99·6°. There is still slight intermittent hæmorrhage from the left ear. General condition good.

15th.—In much the same condition. Hæmorrhage from the ear has ceased.

16th.—This morning a fracture was discovered through the right side of the body of the jaw, close to the symphysis. Crepitus and abnormal mobility were marked. These symptoms could not be obtained previously. He complains for the first time of difficulty of breathing. Expectorates some quantity of phlegm, not tinged with blood. Did not complain of any pain in the larynx. Chest examined, and some subcrepitant rhonchi heard scattered over the bases. Morning temperature 102·2°; evening 101·4°.

17th.—Morning temperature 102°. An exacerbation of the dyspnœa came on suddenly about 11 A.M., with pains in the larynx and stridulous breathing. The dyspnœa increased during the day. Laryngotomy was performed at 10 P.M. by Mr. Ground, the house-surgeon, with immediate relief to the patient. Previously to the operation very little air was heard entering the lungs. Temperature was then 101·2°.

18th.—Feels much easier; respiration free. Morning temperature 100·6°; evening, 103·4°.

19th.—Is very restless this morning. Temperature 102·4°. Respiration rapid; perspiring freely; subcrepitant rhonchi over the lower lobes of both lungs. The deafness of the left ear has passed off. The fracture of the thigh has become displaced again, from the restlessness of the patient; the leg was accordingly placed on a McIntyre splint, continuous extension being kept up by a weight attached to the foot-piece. Evening temperature 104·2°.

20th.—At 9.50 A.M. had a rigor, during which the temperature was 104·2°. Began to perspire at 10.30, and when the temperature was 105° crepitant rhonchus and dulness were found to be present over right base in the afternoon; great increase of the dyspnœa.

21st.—The dyspnœa gradually increased, and the patient died at 4 P.M.

Post-mortem.—The lower jaw was found to be fractured just below the condyles on both sides. There was also a fracture through the right half of the body of the bone, descending vertically just external to the incisor teeth for about half the depth of the bone, and then sloping off at an obtuse angle till the lower margin was reached, in such a manner that the right half dovetailed into the left half of the body of the bone. This fracture had evidently been impacted on the patient's admission. On opening the larynx, the mucous membrane as far as the vocal cords was found much swollen. There were also some patches of dirty-looking lymph lining it. The thyroid cartilage was fractured linearly in a vertical direction. The cricoid had also sustained a slight fracture, whilst an internal lamina was separated in a necrosed state from the rest of the cartilage. Two small abscesses were found in the neighbouring soft parts externally. The mucous membrane was ulcerated opposite the cricoid. The right thigh was fractured at the junction of the middle and lower thirds. A considerable quantity of purulent fluid surrounded the broken ends. On sawing off the lower portion of the upper fragment, the periosteum was seen to be stripped off from the bone, whilst a mass of fungous granulations projected from and filled the medullary cavity. There was no fracture of the base or of any part of the skull. The membrana tympani was intact on the left side. A grumous mass of dried blood lay in the left external auditory meatus. The left lower lobe of the lung was congested, and floated in water. The right lower lobe was in a state of commencing hepatisation.

WEST LONDON HOSPITAL.

RETENTION OF URINE AND PERINEAL ABSCESS FROM STRICTURE OF THE URETHRA; INTERNAL URETHROTOMY TEN DAYS AFTER THEIR RELIEF; GOOD RESULT.

(Under the care of Mr. TEEVAN.)

EDWARD H——, a thin, wiry-looking labourer, forty-five years old, was admitted into the hospital on July 28th, suffering from retention of urine and a large perineal abscess. The patient stated that he had had two attacks of gonorrhœa, the first one as far back as thirty years ago. For many years he had experienced difficulty in making water, and twelve years ago had retention of urine, which was relieved by medicines and a hot bath, the surgeon not being able to pass an instrument. The patient had been seen a few times before his admission by Mr. Angove, the house-surgeon, who had advised him to enter the hospital for operation. When admitted with retention, on July 28th, the perineum was much swollen, and there was distinct fluctuation, but the tumefaction was limited to the perineum, and did not affect the scrotum or penis. Although the man's temperature was up to 102°, there was but little constitutional disturbance, and he was calm and collected. Mr. Angove passed a No. 2 silver catheter, and relieved the retention. Mr. Teevan, on his arrival at 3 P.M., made an incision into the median line of the perineum, and let out about a quarter of a pint of pus, apparently not mixed with urine. The next morning Mr. Angove found the patient quite comfortable, and his temperature fallen to 99·2°. On August 8th Mr. Teevan divided the three strictures, two of which were in the penis, from before backwards, and passed No. 25 to show that the passage was clear. No catheter was retained in the bladder, and there was no bleeding or rigor after the operation. On August 12th, 16th, and 19th, No. 25 metal "bougie à ventre" was passed. The patient was afterwards taught to introduce a large French catheter for himself, and on August 23rd he left the hospital in all respects quite well, the urethra being perfectly watertight. He called at the hospital on Oct. 7th, and passed No. 24 bougie with ease, although no instrument had been introduced for six weeks.

Mr. Teevan remarked that he had in this case deferred the operation because the retention had been relieved before he saw the case, and, beyond giving a free exit to the perineal abscess, there was no indication for the immediate performance of any kind of urethrotomy. It might be asked, inasmuch as the urethra admitted a small silver catheter, why had he not passed a slender staff into the bladder and done external urethrotomy?—thus opening the abscess and dividing the strictures at the same time. His answer would be, that the penile strictures could not have been attacked by external urethrotomy, and he had therefore performed internal urethrotomy when the constitutional disturbance had passed away and the parts were in a quiet condition. An operation was indicated in the case on account of the situation and character of the strictures. The nearer a contraction was to the meatus externus, the less amenable it was to dilatation and the less the risk attached to any cutting operation for its relief. The urethrotome he had used was a modification made by him of Sédillot's, and he believed it fulfilled every requirement.

NORTH HERTS AND SOUTH BEDS INFIRMARY, HITCHIN.

RUPTURE OF DIAPHRAGM AND PROTRUSION OF STOMACH INTO THORAX; RUPTURE OF LIVER, ILIAC VEINS, AND JEJUNUM.

(Under the care of Mr. O. FOSTER and Mr. O. H. FOSTER.)

For the notes of this case we are indebted to Mr. E. A. Praeger.

J. B——, while working in a brick-field, soon after twelve

o'clock a quantity of earth slipped, and falling on him threw him across a tram rail. When dug out he was very livid, but quite conscious, and complained of a severe pain over his chest. His fellow-workmen administered brandy in small and repeated doses, and, having procured a cart, brought him to the infirmary, a distance of five miles and a half.

On admission at 2.15 P.M. the lips were blanched, face livid, pupils unevenly contracted, insensible to light, pulse not perceptible, and there was very urgent dyspnœa. Contusions over abdomen and sternum were seen, but no fracture could be discovered. An attempt was made to administer brandy, but he could not swallow. He repeatedly expressed a desire to micturate, but this he was unable to accomplish. Died at 2.25 P.M.

Autopsy, twenty-four hours after death. — Body well nourished; very muscular. Pectoral muscles showed traces of great contusion. On removing the sternum it was found that there was no fracture, but the diaphragm was ruptured on the left side in the direction of its fibres, and the stomach, which contained a quantity of food, had been forced through the rent, and was lying over the left lung, which was partially collapsed. The heart was under the middle of the sternum; the liver was badly ruptured in three places, and the iliac veins on both sides were ruptured, and a quantity of blood effused in the surrounding tissues.

The presence of a tapeworm in the peritoneal cavity drew attention to the fact of injury to some portion of the intestines, and a rupture was soon found in the lower third of the jejunum, through which the worm had escaped.

Remarks.—It seems remarkable that with such severe injuries the patient should have lived for rather more than two hours. A somewhat similar case is recorded in Erichsen's "Science and Art of Surgery," vol. ii., p. 562, but in that case it was the colon which had been forced into the thorax, and was overlapped by the left lung; in this it was the stomach which had protruded, and so pressed on the lung as to cause it to collapse.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THIS Society met on the 17th inst., the President, Mr. G. Pollock, in the chair. At the commencement of the proceedings the President announced that the Council had resolved to set apart the evening of January 16th for the exhibition and description of specimens of Visceral Syphilis. He also laid on the table the volume of the Society's Transactions for the past session, and intimated that it would be shortly distributed to the members. The meeting was well attended, and some interesting specimens were shown, including double thoracic aneurism, by Dr. Pearson Irvine, and primary scirrhus of the bladder, by Mr. Butlin. Mr. Barker raised the question of friction of arteries in pulsating against bony prominences as a cause of atheroma.

Dr. PEACOCK exhibited a specimen of Mediastinal Tumour invading the Lungs and Heart. The patient from whom it was taken was a dock labourer, thirty-eight years of age, and was admitted into the Victoria-park Hospital at the end of July. There was much œdema of the chest-wall, neck, and face, from venous engorgement; and dulness over the lower half of the chest, both anteriorly and posteriorly. The man survived two months; he suffered much dyspnœa, but the swelling of the parts named subsided and recurred; finally œdema of the lower limbs appeared. The tumour was found to embrace the descending and partly the ascending vena cava, the heart, which was of large size, being displaced to the left. It invaded also the lower lobe of the right lung, which had broken down into a large abscess. The bronchial glands were enlarged, but not infiltrated. A gland above the clavicle was, however, the seat of the new growth, the nature of which was probably that of a medullary sarcoma. The descending cava appeared to be wholly obliterated. Dr. Peacock remarked that the expectoration during life was of a "currant-jelly"-like character; and, in answer to Dr. Green, he said that he thought this peculiar to medullary sarcoma of the lung, but he was not sure whether it was met with in cases of lymphadenoma. In reply to Dr. Greenfield, he stated that in two or three cases of ulcerating cancer of the lung which he had seen this kind of expectoration did not occur.—Dr. POWELL said that he had never met with this form of sputa in cases of lymphadenoma; in one such case there was much hæmoptysis. In one case the expectorated matters were so like that described that he had been led to suspect malignant disease, but this had occurred four or five years ago, and the patient was still alive.—Mr. HULKE had seen many examples of secondary cancer, sarcoma, and lymphadenoma of the lung, but in none was there this peculiar form of expectoration; and Mr. W. HAWARD confirmed this statement with regard to several cases of lymphadenoma and one of secondary sarcoma of the lung. — Referred to Morbid Growths Committee.

Dr. GREENFIELD exhibited two examples of Solitary Kidney, in each of which the right organ was congenitally absent. The first specimen was from the body of a female aged nineteen: the left kidney weighed seven ounces and a half, was normal in position and relations, but was provided with two ureters, one arising above the other, the hilus being in front of the organ; the upper ureter opened into the left side of the bladder, and the lower crossed the middle line below the brim of the pelvis to end on the right side of the bladder. The renal artery was single, dividing into two branches, one to each hilus, and there was no vestige of a right renal artery. The bladder was normal and symmetrical. There was only one ovarian artery—the left,—which, dividing into a right and left branch, supplied both ovaries. The suprarenal bodies occupied their normal positions. The second specimen was from a male fifty-nine years of age, the subject of urinary fistula. No trace of a right kidney existed, the left organ being large and lobulated. The ureter was single, there being absence of the right ureter and also of the right vesicula seminalis and vas deferens. The suprarenal capsules were natural. There were five cases of congenital absence of one kidney recorded in the Pathological Transactions; others being instances of atrophy in which the ureter still persisted. The anterior position of the hilus in the solitary kidney is pointed out by Rokitansky. The suprarenal capsule did not appear to follow the kidney in these cases. Dr. Greenfield also commented on the associated absence of the vesicula seminalis and of the kidney and ureter in the second case. A specimen shown at the Anatomical Society of Paris presented absence of the left kidney, ovary, and Fallopian tube, and the left half of the uterus was undeveloped. The first specimen was allied to the horseshoe kidney, and probably arose from some abnormal development of the vessels.

Dr. COUPLAND also showed a specimen of Solitary Kidney, which appeared to be a transitional form between Dr. Greenfield's first specimen and the horseshoe variety. This organ was seated on the left side, the right kidney being fixed to the lower part of the left. The ureters passed in front of the organ, the right crossing the spine at the brim of the pelvis. The right suprarenal capsule was in its normal position.

Dr. PEARSON IRVINE exhibited a specimen of Aneurism of the Thoracic Aorta, which exhibited many features of interest. The patient, a female, forty-four years of age, came under the care of Dr. Silver, at Charing-cross Hospital. Three years before her admission she began to suffer from substernal pain, occurring in paroxysms, followed by dysphagia, and shortly after by cough and dyspnœa. One year after she noticed a swelling the size of a marble in front of the chest; and then, one year before admission, all the symptoms abated, and for some time she enjoyed fair health. Then another tumour appeared, and she came into hospital, where she died suddenly after a month's stay. The ordinary physical signs of aneurism, as distinguished from other intra-thoracic tumours, were absent. A systolic murmur was audible only in the front of the chest; the aortic second sound was quite healthy. At the post-mortem examination an extensive aneurism was found involving the greater part of the thoracic aorta. The aneurism consisted

of two portions, the larger of which was globular in shape, involving the whole aortic arch, and compressing the trachea, œsophagus, right vagus nerve, which was stretched over it, and the descending cava, which was, however, pervious. The gullet and trachea were displaced to the left. This portion of the aneurism had eroded the sternum and formed the tumour observed during life; it was nearly entirely filled up by laminated clot. Immediately succeeding this, and separated from it by a constriction, was the smaller portion of the aneurism, involving the upper part of the descending aorta, which had compressed the bronchus almost to occlusion, and had ruptured into the tube. Dr. Irvine remarked that had the aneurism been limited to the descending aorta the symptoms during life would have been wholly ascribed to changes in the lung, which, from the compression of its bronchus, was riddled with abscesses. He referred to a somewhat parallel case recorded by Dr. Burney Yeo in the last volume of the Society's Transactions, where, as here, death was occasioned by a posterior aneurism, one on the ascending aorta being also present and alone diagnosed. He contended that the pulmonary disorganisation must have been due to the pressure on the bronchus, and not on the nerves in the root of the lung.

Mr. BUTLIN showed a specimen of Scirrhus Cancer of the Bladder, remarkable on account of its rarity, and by its infiltrating uniformly all the coats of the viscus, causing gradual diminution of the size of the organ, and rendering it unable to admit either of contraction or dilatation. The late Mr. Travers, in his paper on Cancer of the Bladder, states that he had never seen an instance of scirrhus disease; and Gross, of Philadelphia, has only met with one case in the course of twenty-five years. A specimen exhibited by Dr. Bastian at the Society, and reported on by Dr. Cayley and Mr. Hulke, appeared to be of this nature. The bladder now shown was extremely hard; it was adherent to the surrounding tissues, and the growth had infiltrated the os pubis. Internally it was inflamed and sloughing. There was suppurative nephritis of the left side. Microscopically it proved to be typical scirrhus, and Mr. Butlin sent round drawings of sections taken from various parts. He remarked that the absence of a tumour in the viscus was not uncommon when scirrhus invades hollow organs, infiltration and thickening of the walls being the chief features. The patient was a man, forty-five years of age, who at first exhibited only the hæmaturia common to all forms of vesical cancer; but during the last four or five weeks he was unable either to hold his water or to pass any quantity at a time. In reply to Dr. Coupland, Mr. Butlin added that the prostate was healthy, the disease of the bladder being primary with secondary infiltration of lymphatic glands, peritoneum, and liver.

Dr. F. ROBINSON brought forward a recent specimen of a Lung from a case of fatal hæmoptysis, the subject being a soldier, twenty-nine years of age. Both lungs were studded with tubercle in various stages, and at the apex of one of them were two vomicæ, the size of walnuts, and filled with blood-clot. Although the patient had contracted syphilis, there was no indication of gummata &c. in any organ, and Dr. Robinson questioned the statement in some quarters as to syphilis playing a main part in the production of phthisis.—Dr. POWELL suggesting that specimens such as this should be referred to a committee for investigation, in order, if possible, to arrive at a definite conclusion as to the existence of a special "syphilitic phthisis," Dr. ROBINSON said that he did not bring the specimen forward as a case of syphilitic lung-disease; and Dr. MURCHISON pointed out that in no other organ of the body was there any indication of the effects of constitutional syphilis.

Dr. GOODHART exhibited two specimens of Tumour of the Lip containing Cartilage, one of which contained also osseous material and fibro-cellular growth, the other myxomatous and yellow elastic tissue. He referred to two other instances in which a tumour in the lip was made up of adipose and of fibrous tissue, and did not consider that the term applied to them by Sir James Paget—namely, "labio-glandular"—correctly described their structure, which was that of a connective-tissue growth, containing hardly any glandular tissue. The vicinity of glands was a likely place for the development of such tumours; and he instanced the similarity between the present specimens and those from the parotid gland.—Mr. HULKE did not think these growths were so very uncommon, although they seldom attained such a size as to require removal. They are so frequently met with in the neighbourhood of the muciparous glands on the inner surface of the lip that he was disposed to agree with Sir James Paget in regard to their nomenclature. He had examined several, and believed them in their early stage to be myxomatous, later cartilaginous, sometimes with specks of ossification. — Mr. BUTLIN contended that the small amount of glandular tissue found in these growths afforded no argument against their origin within the glands, but was in favour of it, judging from the analogy of mammary and parotid tumours. As the connective tissue of these growths increases the gland-elements disappear, and in the case of mammary tumours a recurrent nodule may have no glandular tissue in it at all.—Dr. GOODHART quite admitted that such tumours may grow in the midst of the gland, but from the connective tissue, and not the secreting structure. If the tumours were principally glandular, the gland-tissue would be likely to surpass the connective tissue in amount. — Mr. HULKE did not mean that gland-tissue could be transformed into myxomatous tissue, but that all glands contained a certain amount of connective tissue, which in these cases was probably the starting-point of the growth. — Dr. GREENFIELD referred to a case of a similar tumour in the neighbourhood of the parotid, in which undoubtedly a new formation of glandular tissue had taken place. It seemed as if in the neighbourhood of glands there was a tendency to develop into myxomatous and then into cartilaginous tissue. Quite recently he had met with a glandular tumour of the testis which had recurred as such.

Mr. BARKER related a case of Popliteal Aneurism, and exhibited a preparation of the aorta and great vessels which was remarkable for the symmetrical disposition of endarteritic patches on the two sides. The aorta was almost wholly free from disease, but raised patches of translucent material occurred on the posterior wall of the right common iliac artery, on each external iliac trunk as it passes over the pubic bone, and throughout the femoral artery; and in the popliteal the lesions were on the anterior wall, the left vessel being the seat of a small aneurism blocked by clot. The change in the lining membrane of the vessels disappeared in the tibials of each side at about the same level. Mr. Barker considered the specimen to show the existence of another factor in the production of these inflammatory changes (which in no part had yet become atheromatous)—viz., the friction or jarring of the vessel against hard structures. It was curious that the left common iliac artery, which, unlike the right, is not supported by the lumbar vertebræ, should have escaped these changes. He thought he had seen atheroma of the basilar artery limited to the under surface of the vessel; and he remarked upon the frequent occurrence of aneurism in situations where arteries are applied to bone. The tibial arteries are rarely the seat of aneurism, and it would be interesting to know whether aneurism of the right or left common iliac was the more frequent.—Mr. MORRIS remarked that in this specimen the aorta, which in its whole length pulsates against the vertebral column, was quite free from disease. The occurrence of popliteal aneurism was much more easily explained by the strain thrown on the artery in the movement of the joint.—Dr. CRISP could not accept Mr. Barker's hypothesis without further evidence.—Mr. HULKE pointed out that if a flexible tube be bent, the strain is greatest upon the convex side of the bend.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

THE first meeting of the Clinical Society for the present session took place on Friday, the 13th inst., and there was a very good attendance of the members, the surgical element being the most strongly represented. In the absence of the President, the chair was occupied by Mr. Bryant. It was announced that the volume of the Transactions for the past session was nearly ready. The greater part of the meeting was occupied by the relation of an interesting case of intestinal obstruction and the discussion thereon, which elicited some very diverse experience on important diagnostic points.

Dr. WOLSTON read the notes of a "Case of Intestinal Obstruction" which occurred under his care, Mr. Maunder

being subsequently associated with him in the treatment of the case. It illustrated, the author observed, the great difficulty of diagnosis in such cases, and how little the course of symptoms might point to the cause of the occlusion of the bowel. The patient was a young lady, twenty-five years of age, who, up to the time of her attack, had been in robust health. She was mentally deficient, but fully capable of expressing her feelings, and had no lack of sensibility. The only point in her history which seemed important was that when ten years of age she suffered from pain in the left hypochondrium, occurring paroxysmally, which lasted for some time. There had been no complaint, however, for ten years past, though she had stooped and limped ever since the time of the pain. The illness commenced on Feb. 20th with headache, sickness, and slight pain in the bowels; the bowels were confined at the time. She continued to suffer from constipation, loss of appetite, slight vomiting, and some pain until March 3rd, when Dr. Wolston was called to her, and she was said to be suffering from a slight attack of gastric fever. When seen, the tongue was coated; face apathetic; some fever; urine thick. The abdomen was tympanitic; no tumour could be felt; there was no pain or tenderness on pressure. The bowels had been slightly moved the day before, and there was no sickness that day; no headache; temperature 99·5° F.; pulse 80. Copious enemata and fomentations to the abdomen were ordered. On March 4th there was paroxysmal pain and increased tympanites, but no tenderness. Another enema was given of water with castor oil, and the bowels were freely opened, but great pain and sickness followed the injection. The pain continued, with frequent vomiting through the night. Next day the vomit was stercoraceous; the abdomen very tympanitic. A long tube was passed, and water injected, the operation being repeated several times. Nutrient enemata were also given. On March 7th she was seen by Dr. Sutton, who thought there was constriction by a twist or band, but did not consider operation advisable. On the 9th there was no pain or sickness, and inversion and shaking were practised, but with no benefit. The abdomen, however, became flattened below the umbilicus. On the 11th, the distension being considerable, it was thought desirable to puncture the bowel by a small trocar, to allow of the escape of flatus, which was done, but without much relief. The patient was seen in the afternoon by Mr. Maunder, who kneaded and manipulated the abdomen. But little change was observed during the next ten days; the pain continued pretty constantly, and a good deal of flatus was passed, but the abdominal distension continued considerable. On March 28th there was much sickness, and emaciation had become very marked. Galvanism was applied over the abdominal parietes, and also with one pole on the tongue, the other at the anus, and was productive of free peristaltic action, but gave no relief. This was repeated several times a day until the 30th. A large dose of watery extract of aloes was given at Mr. Maunder's suggestion, and caused a motion, but also much pain. On April 1st the condition was much the same. On April 10th there was great weakness, constant sickness, and a good deal of flatus passed. On the 14th, after kneading the bowels, and giving an enema, a large dark stool of very offensive fæces was passed. The distension of the abdomen diminished, but there was still much vomiting and pain. On the 16th a strange look of the eyes was observed, the face was red, and on the 19th there was slight strabismus. Death occurred suddenly and unexpectedly; it was ushered in by convulsive movements in the right hand and strabismus, breathing became difficult, and death occurred in about an hour, without any general convulsion or loss of consciousness. At the post-mortem, the peritoneal surface of the intestines was found to be covered with tubercular granulations resembling grains of boiled sago and yellowish-white nodular masses, thickly scattered over their surface, the intestines matted together, and in places held down by puckered fibrous-looking adhesions apparently of old date. The bowels were tightly contracted in some places, but there was no sign of recent inflammatory action. The mucous membrane was healthy, and only the lower portions of the bowel had become emptied. The lungs and brain were not examined. It was evident that any surgical interference would only have accelerated the fatal issue. There was no great emaciation, and nothing in the general condition to suggest the existence of tuberculosis. In conclusion, the authors inquired whether there were any elements in the case which might have led to a diagnosis of the cause of the obstruction, and whether there were any grounds for a belief that tuberculosis was the cause.—Mr. MAUNDER, who was associated with Dr. Wolston in bringing forward the case, observed that it was a further illustration of the difficulty of diagnosis attending abdominal disease. He did not at any time think operation desirable—the patient seemed too well for it. Doubtless, had she not been imbecile, the symptoms might have given a clearer idea of the nature of the disease.—Dr. HILTON FAGGE stated that, having carefully searched the records of Guy's Hospital, he could find no case on record where tubercular peritonitis was the cause of intestinal obstruction; the case in that respect seemed to him unique. But he could not agree with the authors that the diagnosis was so impossible as it seemed to be regarded, and the symptoms as recorded would, he believed, have justified a different diagnosis. Indeed, they would have led him to the opinion that the case was one, not of intestinal obstruction properly so called, but of something affecting the general peritoneal surface and causing constriction at several points. He referred to his paper on the subject in the Guy's Hospital Reports, in which he described a group of cases in which several different parts of the bowels were affected, with no great obstruction at any one point. The characteristic feature of these cases is the *gradual* onset; in the cases of obstruction at one point the onset is usually sudden. His diagnosis would, therefore, have been that of obstruction, either of the small intestine by chronic peritonitis, or enlarged mesenteric glands, or possibly tubercular disease, or else a chronic stricture of the large intestine. A question of importance as regarded diagnosis was, were the peristaltic movements observed when purgatives were not given? A characteristic feature of the form of obstruction under consideration was the paroxysmal pain coming on at intervals apart from purgatives, and accompanied by perceptible peristaltic action at certain parts of the bowels.—Dr. SILVER referred to the importance of attempting to relieve the distension of the bowels in such cases, if only to give some relief. He had employed with this object the aspirator needle in cases of distension from malignant stricture at the juncture of the sigmoid flexure with the rectum, and also in distension of the stomach from pyloric stricture, with great relief. Scarcely a trace of the entrance of the needle could be discovered after death.—Dr. SOUTHEY would have objected to the diagnosis made; but he had never seen an instance of obstruction due to tubercular peritonitis, though several of complete obstruction from chronic peritonitis. His experience as to the occurrence of peristalsis was just the reverse of Dr. Hilton Fagge's.—Dr. BUZZARD inquired what was meant by the term "galvanism" in the report of the case.—Dr. COUPLAND inquired whether in any case of puncture of the intestines any oozing of fæces had been observed. In experiments on the dead body he had found that the openings remained patent.—Dr. SILVER had seen in one case, where the distension was great, some escape of fæces.—Mr. FURNEAUX JORDAN observed that there were some symptoms of cerebral disease, and suggested that tubercular disease of the brain might give rise to obstruction of the bowels, which was not complete.—Mr. GEORGE BROWN thought the question of peristalsis one which should be discussed. He agreed with Dr. Southey as to the greater liability to peristaltic movement when there was not chronic peritonitis, in which the muscular tone must be diminished and reflex movements less readily excited.—Dr. SOUTHEY added that the cases in which peristalsis was most marked in his experience were those of cancerous stricture of the colon; where least, those of chronic peritonitis.—Mr. BRYANT had had some experience in tapping the intestine for distension. In two cases which he recalled fæcal extravasation resulted: one a case of great tympanites in a man with compound fracture of the leg; the other a case of sloughing umbilical hernia. Both patients died within a few hours of the punctures, which were done merely to give temporary relief; and in both cases there

was fæcal extravasation at the seat of some of the punctures. This indicated a necessity for caution. He was not aware that tubercular peritonitis was so rare a cause of intestinal obstruction; but, at any rate, in this case there were none of the features either of a sudden occlusion by band or stricture, or of a chronic stricture of the colon. The symptoms were those of marked chronic disease affecting the small intestines. He agreed with Dr. Southey, as to the occurrence of peristalsis, that it was most marked in chronic contraction near the lower end of the small or in the large bowel, and also in the early stages of acute obstruction, where, however, it was soon paralysed. In only two cases of chronic peritonitis had he seen the same; both were cases complicated with abdominal tumour, and here the peristalsis was limited to certain parts of the abdomen, where it was readily excited by slight pressure. — Dr. WOLSTON expressed his willingness to submit to correction of the diagnosis, but pointed out that the absence of tenderness was opposed to the view of tubercular peritonitis. As regarded peristalsis, there was no appearance of peristaltic action, except on rubbing the abdomen with castor oil or on galvanising it. The puncture was performed to give relief; it gave little, and was not repeated; and it was evident from the post-mortem that but little good could have been done unless by very numerous punctures at different points. The "galvanism" was a rotatory magneto-electric machine.

Mr. MAUNDER gave an account of the sequel of a case of Gastro-enterotomy related by himself and Mr. Gordon Brown in the previous session. (See THE LANCET, 18th March, p. 425.) The operation was performed in November, 1875, and in March the patient, who was sixty-eight years of age, was in fair general health. The abdominal tumours, however, increased in size, and hiccough occurred. The artificial anus continued healthy. To avoid inconvenience the patient was advised to have an enema of half-a-pint of water daily, which answered perfectly. A sponge tent was worn in the aperture as a plug. The patient died from exhaustion seven months after the operation. A post-mortem was obstinately refused by the friends. The operation had only been performed successfully three times in the country—once by his colleague, Mr. McCarthy, once by Mr. Wagstaffe at St. Thomas's, and by himself.—Dr. COUPLAND inquired whether Mr. Maunder knew what part of the intestine was opened in his case. He mentioned that in examining one body he found that the jejunum would have been opened; had this occurred nutrition would have been greatly interfered with.—Dr. GREENFIELD said that he had been led by Mr. Maunder's case to make some investigations as to the part of the intestine usually found in the situation recommended by Trousseau for the operation, and adopted by Mr. Maunder—viz., a little below the mid-point of a line drawn from the umbilicus to the right anterior superior iliac spine. He had examined a number of bodies, in many of which there was distension of the bowels from various causes, by making an incision at the point named, and seizing the protruding bowel, before the contents of the abdomen were disturbed. In at least four or five cases the cæcum was opened, in one the sigmoid flexure, and in one the small intestine, more than eight feet above the ileo-cæcal valve. He could not at the moment give exact statistics. These facts showed, however, that Trousseau's statement could not be accepted as of universal application. Still, the operation was none the less valuable, resting, as it did, upon the fact that distended bowel—i.e., bowel above the seat of stricture—would be opened, and no other situation could be selected for incision more favourable, or more likely to open the intestine as low as possible.—Mr. MAUNDER said that Mr. McCarthy had similarly examined between sixty and seventy bodies, and had told him that in a very large majority of cases the ileum was opened near the ileo-cæcal valve.—Mr. HEATH inquired whether the patients in the other two cases were still living.—Mr. WAGSTAFFE said that his case was still alive.

Mr. TEEVAN related a case of Traumatic Stricture, with numerous fistulæ, cured by Internal Urethrotomy. The patient, who had been a sailor, in 1854, whilst engaged in the rigging, slipped and fell astride a spar, causing rupture of the urethra, displayed by the usual symptoms, and followed by extravasation of urine. Three years later abscesses formed around the urethra. When seen by Mr. Teevan there was great thickening of the corpus spongiosum; the scrotum was puckered; there were marks of sixteen fistulæ, five of which were patent. The fistulæ were treated at first by caustics &c., and bougies tried to dilate the stricture; but all these measures failing, internal urethrotomy was performed, and with complete success. Mr. Teevan insisted on the following points in the case as of importance: — First, that the stricture was traumatic; secondly, that it had lasted for twenty-one years; thirdly, that the fistulæ were penile, and therefore difficult to close; fourthly, that three different methods, drawing off the water, cauterisation, &c., had been tried without success; and, fifthly, that all were cured by Otis's method, on the principle of making the passage normally free. He insisted also upon the fact that a catheter was not left in the bladder after the operation.—Mr. HEATH said that the case appeared to him to be one of very ordinary nature, and the treatment in no respect differed in principle from that taught at every modern medical school. If the stricture is dilated the case gets well. If it had been cut into, split, or dilated, the wound would have healed. He thought that caustic-pointed probes were exploded long ago, and as to keeping a catheter in the bladder it was against the teaching at every general hospital. Dr. Gouley, who had strongly advocated the practice of not keeping it in, thought he had made a discovery, but it was really no discovery at all, as it was practised everywhere. — Mr. MAUNDER remarked that Mr. Teevan's case was very interesting, but the treatment not novel, except that Otis's operation was used. The object was to dilate the urethra to a greater degree than was thought needful or practised in England. As to the keeping in of a catheter, it should only be kept in when hæmorrhage was dreaded; he had never had reason to keep it in after a splitting operation. — Mr. TEEVAN still thought sixteen fistulæ a rare number, and he did not know of a case where five were open. Dilatation was carried as far as No. 9 without success. He thought, too, that English surgical works advocated leaving a catheter in the bladder. He inquired what Mr. Heath would have done in such a case.—Mr. HEATH said he should have passed a Holt's dilator, and split to the full size. Cases of four, five, or six fistulæ were not uncommon. He did not speak of the statements of books, but of the practice in general hospitals.

A report of a case of Hydatid Tumour of the Orbit, by Mr. Higgens, was read by the Secretary. The patient, a girl, aged fourteen, who had always been delicate, came to Guy's Hospital, having for a month had pain in the right eyeball, which had then begun to protrude. It was pushed downwards and forwards, but the lids could be easily closed. Movement of the eyeball upwards was impossible, but other movements were perfect. There was diplopia when vision was directed upwards; the eye read Snellen 10. The optic disc was red, greatly swollen, and bulging into the vitreous; the retinal veins were large and tortuous, and their visible number was greatly increased. The arteries were of about the normal calibre. There was no pulsation in or about the orbit, and no bruit could be detected; but there was some fulness deep in the orbit beneath its roof. It was thought there was a growth situated between the globe and the superior rectus muscle, passing backwards, and involving the optic nerve. Twelve days after being first seen the eye became inflamed and painful; there was swelling of the upper lid, œdema of the conjunctiva, and increased impairment of mobility of the globe. There were no rigors and no constitutional disturbance. An abscess of the orbit being suspected, an incision was made through the conjunctiva beneath upper lid, and a director passed backwards came against a firm substance at the back of the orbit, which was incised, and blood only escaped. A fortnight subsequently the protrusion was increasing. An incision was then made through the soft parts in a line parallel with the upper border of the orbit. The lachrymal gland was found pushed forward and was removed. Behind it was a firm growth, which was torn away with the fingers and the handle of the scalpel. The growth collapsed, and was then found to extend to the apex of the orbit and to be closely connected with the optic nerve, whence it was scraped away. It was an extremely thick-walled cyst, composed of inflammatory tissue, inside which was a thin pellucid cyst, which separated easily, and which the microscope demonstrated to be made up of a delicate membrane presenting an appearance of serrated fibres. The contents of the cyst had escaped; no hooklets nor daughter cyst were

found. The whole tumour was nearly as large as the eyeball, but its central cavity was very small. After the operation, the wound was stitched up and the edges of the lids were pared and united so as to prevent subsequent damage to the eyeball from exposure. Some suppuration occurred at the site of the wound, but the patient made a good recovery. A month after the operation, the eye was found to deviate downwards; there was no mobility upwards; the lid could be raised to a very limited extent. The patient read Snellen 2½ easily; she had double vision when attempting to look upwards. There was a plentiful secretion of moisture, notwithstanding the absence of the lachrymal gland. The swelling of the optic disc had quite subsided, but there was some haziness of its inner border. The retinal vessels were quite normal.

OBSTETRICAL SOCIETY OF LONDON.

AT the first meeting of this Society, October 4th, 1876, Alfred Meadows, M.D., F.R.C.P., Vice-President, in the chair, Dr. WILTSHIRE showed a specimen of Utero-Vaginal Rupture, removed post mortem from a patient who had died during labour. A fibroid tumour the size of a large orange had interfered with the progress of labour. The rupture occurred at the junction of the cervix uteri with the vagina posteriorly. The walls of the uterus were remarkably thick. Ergot had been given.—Dr. PLAYFAIR inquired why the forceps had not been applied. A large proportion of cases of rupture followed the use of ergot. An early application of forceps might have averted the catastrophe. He would further ask why gastrotomy was not performed when the child had escaped into the abdomen. It would have given the patient a better chance of recovery. —Dr. BRAXTON HICKS inquired as to the size of the os uteri, and where it was at the time of rupture. If the cervix were drawn over the head, how was it that the child escaped into the peritoneum?—Dr. AVELING inquired how soon after death the post-mortem had been made. Sometimes displacement occurred from the effect of decomposition after death.—Dr. MEADOWS suggested that possibly the tumour had been mistaken for the head, the former being so large as to interfere with the descent of the head.—Dr. ROPER asked as to the relation of the tumour to the rupture.—Dr. WILTSHIRE thought that the accident would possibly have been averted if forceps had been used, but there were objections to their employment in this case, which altogether was a very painful one.

Dr. DALY related the particulars of a case of Intra-Uterine Tumour, where death ensued two hours after removal. The patient had been confined six weeks. Violent and continued pain set in. A tumour was detected, and enucleation attempted by the fingers. Rupture of the uterus ensued; there was no hæmorrhage; but the patient died from shock two hours afterwards. Rupture seemed due to softening of the uterus.—Dr. H. SMITH inquired whether any incision had been made across the face of the tumour before enucleation was attempted.—Dr. DALY replied in the negative.

Dr. BANTOCK exhibited a specimen of a Two-headed Monster, where the bodies were united from the breast downwards. There were but two legs, with a third rudimentary one.—Dr. MEADOWS suggested that it would be well to present it to the museum.

Dr. CLEMENT GODSON contributed a paper entitled, "Midwifery Statistics of Thirty-five years' Practice," compiled from the records of his father's practice in Barnet, including the wealthy and the poorest. The results were shown in tables drawn up indicating the percentage of ordinary normal presentations, placental and compound. In the single practice of Mr. Godson there were 2203 deliveries, and in the compound practice of himself and a partner 1020. The records were kept separate so as to compare the results of the combined and single practice, forceps having been applied more frequently of late years. The maternal mortality amounted only to 8 in the 3223 cases. The percentage of still-born children was slightly over 5 per cent.—Dr. PLAYFAIR remarked that he had recently pointed out that a low ratio of forceps operations was associated with a high fœtal mortality, and had advocated an increased frequency of forceps operations as calculated to lessen the fœtal deaths. He had then alluded to the remarkable results of Dr. Hamilton, of Falkirk, who had two successive series of cases of 800 and 700 without a single still-birth. He himself (Dr. Playfair) had attended nearly 300 consecutive cases without losing a single child. In Mr. Godson's practice forceps were used once in 66 cases, and in the other once in 9, and yet in both almost one out of every 20 children were still-born. He would ask the explanation of this.—Dr. HICKS, in reference to an allusion as to hospital statistics not being so reliable as those of private practice, stated that at Guy's patients were under observation for a month after the confinement, and that the death-rate could be relied upon. It varied between 2½ and 7 per thousand. Before we could fairly estimate the death-rate from forceps we must first ascertain how frequently ergot had been given.—Dr. CHALMERS thought Dr. Hamilton's statistics were quite as likely to require explanation as Dr. Godson's. He doubted the accuracy of so low a rate of mortality as Dr. Hamilton's statistics gave. — Dr. ROPER remarked that, although the fœtal mortality might be diminished, the maternal mortality was probably increased from the frequent resort to forceps. — Dr. ROUTH stated that he had gone closely into the question as regards operative midwifery among the London poor and those of the manufacturing districts. Long forceps were more frequently used on account of deformities of the pelvis, and in these cases the risk to both mother and child was increased. Dr. Playfair stated that we are justified in using them once in five cases. The late Professor Simpson had shown that the mortality during childbirth was greater in proportion to the number of hours women were left in labour.—Dr. PLAYFAIR observed that he had not said that he himself advocated so frequent an application of the forceps. He would strongly insist upon the importance of distinguishing between the high and low forceps operations. The former he considered to be a serious matter, not to be lightly undertaken, nor without grave risk to the mother. His remarks applied solely to the low forceps operation, when the head was on the perineum, and merely delayed by the want of *vis a tergo*. Under such circumstances the operation was perfectly easy, quite safe, and highly conservative both to the mother and child—far better than giving ergot. — Mr. GODSON said, when he commenced practice operative midwifery was looked upon by the public in a very different light from what it was now. Had he used the forceps often, he would soon have had no midwifery practice at all. He never applied forceps so long as there was a prospect of labour being completed naturally, without injury to either mother or child. He believed that the large number of premature births accounted in a great measure for the still-births. Had forceps been more frequently resorted to, the mortality would probably have only been very slightly diminished.

Dr. A. L. GALABIN related the histories of two cases of Pregnancy complicated by extensive Malignant Disease of the Cervix Uteri. In the first hæmorrhage at irregular intervals had taken place during the whole term of pregnancy. Labour came on at full term; the cervix was dilated by Barnes's bags. Perforation was then resorted to, and the head extracted by the cephalotribe. The patient recovered; a vesico-vaginal fistula resulted from sloughing. The second case was interesting also, inasmuch as amputation of the cervix by the galvano-caustic was resorted to five months after labour, the patient then being four weeks pregnant. She carried the child to full term, when dilatation of the cervix was effected, and bipolar version performed, and the child extracted living. Peritonitis set in, but the patient recovered. The two cases showed that delivery might sometimes be effected by the natural passages, when, at first sight, Cæsarean section seemed the only resource.—Dr. MEADOWS thought, as a rule, it was better to resort to Cæsarean section, as, although in these two cases the patients fortunately recovered, the maternal risk was so great, and there was an almost uniform death of the child, when delivery was attempted *per vias naturales*. In the first case the dilating bags changed the position of the presenting head. This fact he had noticed in another case, and it would be interesting to know the experience of others on this point.—Dr. GODSON thought the first case confirmed the opinion he had previously stated, as to the advisability of amputating the cervix uteri in cases of

epithelioma, notwithstanding the existence of pregnancy.—Dr. AVELING referred to a case where three-fifths of the cervix was involved. The idea of Cæsarean section was entertained, but was avoided by dilating the cervix with the fingers, perforating, and turning. Antiseptic injections were used, and the mother recovered perfectly. Where the whole of the cervix was involved, he thought Cæsarean section the better plan.—Dr. EDIS referred to the case he had brought forward last year, where delivery was accomplished *per vias naturales*, the child living, the mother succumbing to pyæmia from the pressure and bruising of the soft parts that had taken place during the extraction of the head by means of the forceps.—Dr. HICKS thought the fact of the head being pushed aside was not a common result from the employment of Barnes's bags. This might easily be overcome by drawing off some of the liquor amnii or by the hand externally pressing the head down.—Dr. MEADOWS said the accident was most likely to happen when the pelvic brim was contracted.—Dr. ROPER stated that he had modified the shape of the bags, and would exhibit them at the next meeting.—Dr. GALABIN said that the present was the only case in which the head had been displaced from using the bags; but it was not an infrequent accident. He thought considerable risk of septicæmia would be run by the amputation of an epitheliomatous cervix in a case of ascertained pregnancy.

MEDICAL SOCIETY OF LONDON.

ON Monday, the 16th inst., a very large number of the fellows of this Society assembled, under the Presidency of Mr. William Adams, to inaugurate the opening of the session.

The PRESIDENT, before reading his address, proposed, as corresponding fellows of the Society, four American gentlemen—namely, Professor Gross, Professor Flint, Professor Joseph Pancoast, and Surgeon-General Barnes. After wishing all the fellows a hearty welcome, and deploring the gaps made in their ranks by the deaths of Mr. de Méric, Dr. Sibson, and Mr. Fred. Disting, all of whom he spoke of in words of the highest praise, Mr. Adams gave a rapid but interesting and graphic account of his visit to the International Medical Congress at Philadelphia. Mr. Adams spoke of the various medical institutions he had visited in Philadelphia, such as the new buildings of the University of Pennsylvania, in which the meetings of the Congress were held; the Pennsylvanian General Hospital, the oldest hospital in the United States, chartered in the year 1751, and containing 220 beds. Here he was enabled to see a good deal of American surgery, through the courtesy of one of the surgeons (Mr. H. H. Pancoast, son of the distinguished Dr. Joseph Pancoast); the College of Physicians, in which there exists a very valuable, though not large, pathological museum; the Jefferson Medical College, which is the principal school for medical education in Philadelphia, and which contains a large and valuable museum. Leaving Philadelphia, Mr. Adams transported his hearers to Washington, the greatest attraction of which city, in a medical point of view, he considered to be its extensive and well-arranged museum, which may be called the museum of the American war. This collection was made under the direction of Surgeon-General Barnes, by the untiring energy of Dr. Otis and Dr. Woodward. He remarked *en passant* that the museum itself is in a building which was the theatre where President Lincoln was assassinated by Booth in 1865. He then alluded to an institution in the neighbourhood of Washington called the "Soldiers' Home," in which the principles of construction and ventilation advocated by Dr. Billing as especially applicable to hospitals have been thoroughly carried out, and he paid a graceful compliment to the hospitality he had received from Dr. Tonor. In passing through New York, Mr. Adams had an opportunity of visiting the hospitals of that city, and also of attending some lectures, demonstrations, and operations (the session beginning the first week in September). The classes of students, he stated, are much larger there than in England. Whilst lauding the skill and dexterity of American surgeons, he quite agreed with Mr. Erichsen that American surgery is essentially the surgery of England, as taught by such authorities as Cooper, Bell, Liston, Brodie, and Fergusson, giving the Americans credit in the way of mechanical contrivances for the introduction of weight extension, with which he coupled the names of Dr. Gordon Buck and Dr. Davies, both of New York.

Dr. ROUTH proposed, and Mr. GAY seconded, a vote of thanks to the President for his interesting communication. This was carried unanimously; and after Mr. Adams had said a few words in reply the meeting adjourned.

ROYAL COLLEGE OF PHYSICIANS.

AT an extraordinary meeting of the College on Oct. 16th, 1876, licences were granted to several gentlemen, whose names appear in another column. A communication from the Colonial Office was read relative to the treatment of leprosy in India by gurjun and cashew oils, and referred to a committee. A communication from the Foreign Office was read, accompanied by a translation of various reports by Dr. Bernhard Beck upon the subject of the disease which has recently prevailed in Mesopotamia. A letter from the College of Surgeons was read on the Scheme for an Examining Board for England, submitting from the conference of the representatives of the medical authorities the following alterations of the amended scheme suggested by the medical committee of the Senate of the University of London, and approved by the Senate—namely, "(1) That the Committee of Reference should be constituted of representatives to be appointed in equal numbers by each of the medical corporations and universities of England, the number proposed being two from each." (2) "That the appointment of examiners from the list nominated by the Committee of Reference should be left entirely in the hands of the three medical corporations whose diplomas or licences will be obtained by the candidates who shall pass the conjoint examination." The College accepted these proposed alterations. With reference to the question of admitting women to the conjoint examination, submitted for the opinion of the several co-operating authorities by the Conference of Representatives, the College resolved that it would be time to consider this question when the Conjoint Examining Board was formed and the occasion arose. The following was referred to the Council: "To consider and report to the College in what manner an increased knowledge of psychological medicine may best be required from the candidates for the College qualifications." It was resolved, "That the Registrar make annually a return of the names of the candidates who have passed the Primary or Pass Examination for the licence, tabulating the number from each school of those who have passed and of those who have been rejected at each examination."

HEALTH OF DUBLIN.—The births registered in Dublin for the third quarter of the year amounted to 2229, equivalent to 28·3 per 1000 of the population; and the deaths, excluding those not chargeable to the Dublin Registration District, were 1548, or at the rate of 19·7 per 1000. The principal causes of death were as follows:—Phthisis caused 189 deaths; convulsions, 137; bronchitis, 133; diarrhœa, 132; heart disease, 88; fever, 52; scarlatina, 42; cancer, 41; pneumonia, 40; hydrocephalus, 33; paralysis, 32; mesenteric disease, 28; apoplexy, 26; liver disease, 26; kidney disease, 22; dropsy, 20; whooping-cough, 20; whilst 2 deaths are ascribed to small-pox, one a girl, aged seventeen, who died in the Meath Hospital, who had but one indifferent vaccination mark; the second case was registered as a death from small-pox by mistake, the patient dying from phthisis. Of accidental deaths 43 were registered—viz., 20 from fractures and contusions, 3 from wounds, 5 from burns and scalds, 13 from drowning, and 2 from suffocation, whilst 3 deaths were homicidal and 2 suicidal.

THE LANCET.

LONDON: SATURDAY, OCTOBER 21, 1876.

IT will be within the recollection of our readers that in the course of the legal inquiry as to the cause of the late Mr. BRAVO'S death questions of a painful and grave nature arose out of the evidence given by Sir WILLIAM GULL on oath before the coroner. One of these questions concerned the seemingly contradictory character of certain statements made by Sir WILLIAM GULL as to the diagnosis of the case, and the communications made to him by Dr. GEORGE JOHNSON and other persons, before he saw the patient, while at the bedside, and subsequently during his visit to the Priory. Another question raised related to the manner in which the obligations imposed, by the custom of the profession and etiquette, upon a consultant in his dealings with other medical men and in the expression of his opinions to the patient and his friends, were discharged by Sir WILLIAM GULL. With regard to the first of these questions, we placed the facts concisely before the profession, and limited our remarks to a simple statement of the difficulty requiring explanation. The second question we did not touch, hearing that it would be referred to the Censors' Board of the Royal College of Physicians for arbitration. In so far as that College claims to control the conduct of its Fellows, it was undoubtedly the tribunal by which a question of this nature ought to be adjudicated. Meanwhile everything would depend on the manner in which the Censors consented to view the issue; whether the question was to be regarded from the broad standpoint occupied by the profession, or its consideration bounded by the narrow limits defined by the College bye-laws. In any event we thought it wise, and respectful to the College of Physicians, to suspend the expression of what we conceive to be the judgment of the profession on either or both of these questions until its formal decision was announced. We are not a little surprised to learn that no formal announcement of the view taken by the College of Physicians of the questions referred to it can be made. Surely the restriction imposed is unwise. Even looking at the matter from the point of policy, it is imprudent to leave a question so vital as that known to be submitted practically unsettled.

We publish in another column a summary, as complete as the conditions laid down by the College will sanction, of the decision at which the Censors have arrived. It will be seen that they dealt exclusively with the question of etiquette, and while manifestly desiring to view the matter in its least grave aspect, they are compelled substantially to condemn the manner in which Sir WILLIAM GULL fulfilled the obligations of a consultant, not only as "seriously infringing at least the spirit of the bye-laws," but leading to consequences which are described as "disastrous." It is impossible not to recognise the wisdom of a rule which enjoins the conduct of a consultation in private, and directs that the opinion formed shall be communicated to the family as a collective judgment, any difference which may arise being stated to the patient or his friends by the ordinary medical attendant. When a consultant, on any pretence, whether that of assuming the responsibility of his own opinion, or because he conceives his diagnosis to be exclusive, takes upon himself the expression of an independent judgment, he violates not only the bye-laws of the College of Physicians, but the clearly understood, though unwritten, laws of professional courtesy, and lays the foundation of consequences which may well be designated disastrous. All that followed in the present case sprang from this initial error on the part of Sir WILLIAM GULL. We reserve what it may be necessary to say further on the subject until we come to deal generally with the broader, and perhaps graver, question of accuracy, with which the Royal College of Physicians apparently has felt no concern.

THE prompt decision of the managers of the Metropolitan District Asylums, at the instance of the Local Government Board, to prepare, in view of the impending epidemic, the Hampstead Hospital again for the reception of small-pox cases, is deserving of all praise. It is to be hoped that the managers will also, as recommended by the Local Government Board, provide with all speed hospital accommodation on the ground which they possess for the purpose at Deptford, and we would add, also, at Fulham. It is, moreover, to be hoped that the action of the managers in respect to Hampstead will be emulated by the various sanitary authorities in the districts, and that the several Vestry and District Board hospitals which were erected during the epidemic of small-pox in 1871, and which still exist, will at once be placed in working order. Although the influence of the approaching but delayed epidemic has not yet shown itself clearly upon the mortality from small-pox in the metropolis, the steady increase of admissions of cases from week to week into the two permanent pauper small-pox hospitals at Homerton and Stockwell, even to the rapid filling of the available accommodation there, can leave no doubt that the epidemic is upon us. We have said the "delayed" epidemic, for it is a notable fact that the epidemic now in progress of development was due last year. The previous epidemic—the great epidemic which began towards the close of 1870—ended in 1872, and, in accordance with the three-year interval which has commonly separated the recurring epidemics of small-pox in the metropolis, the disease in an epidemic form was again looked for before the past year (1875) came to an end. As it happens, the epidemic has been delayed a year, and it is an interesting question for solution how this has come to pass. It is highly probable that the conditions which have most contributed to the lagging (so to speak) of the incoming epidemic have been the exceptional number of persons who were affected in and passed safely through the epidemic of 1871–72, and who thus obtained immunity from further attacks of the disease; the extensive practice of re-vaccination which obtained during the epidemic referred to; and the more effective working of the law as to infantile vaccination, and consequent large increase of vaccination, which was secured in 1871, and has been maintained from

year to year since. If this opinion be correct, we may anticipate that the coming epidemic will neither be so protracted nor so severe as the past one, although the rapidity with which the disease is now being diffused, its fatality, and the occurrence of hæmorrhagic cases, have suggested that the epidemic now beginning is hardly less malignant in character, so far as individual instances of the disease are concerned, than the epidemic of 1871–72. On this account, as also for more general reasons, it is highly desirable at the present time briefly to review the facts of the outbreak last referred to in certain of their practical aspects. And here it may be well to direct attention anew to the elaborate report of the present Medical Officer of the Local Government Board, Dr. E. C. SEATON, on this subject, published in the former medical officer's (Mr. SIMON'S) Annual Report for 1874. This important and curiously instructive official report (which, happily for our suggestion, costs only one shilling) should be in the hands and be carefully studied by every person who has responsible duties to perform in limiting the incidence of the incoming epidemic.

The epidemic of 1871-72 was not peculiar to these islands. It was, writes Dr. SEATON, "part of a general epidemic outbreak of the disease, of world-wide diffusion, marked wherever it occurred by an intensity and malignancy unequalled by any previous epidemic of the disease within living memory." Whatever the causes determining the general epidemic prevalence of small-pox at that time, and its special virulence, the epidemic here concurred with an anticipated period of prevalence. Hence the general question need not affect the more local and practical question we have to consider. The virulence of the disease was particularly distinguished by its attacking numerous people who were regarded as protected against it either by vaccination or by having previously suffered from small-pox. Never before since the adoption of systematic vaccination in this country had this protective measure been exposed to so severe a test, and it was not unnatural that popular belief as to its efficacy was for the moment considerably shaken. When, however, it became possible to study the whole history of the epidemic in relation to vaccination, it furnished the most conclusive proof of the sufficiency of that procedure, if duly exercised, as a protection against small-pox. It may be stated as a truth demonstrable from the facts of the epidemic that, with a comparatively small exception, the lives lost in the epidemic of 1871-72 were, just as in previous epidemics of the century, quite needlessly sacrificed. In other words, the epidemic was fed, not only by the unvaccinated, but also in greater number by the imperfectly vaccinated in the kingdom, the vaccinated forming then, as now, by far the larger portion of the population. But even with this important drawback, the reality of the protection afforded by vaccination was made abundantly apparent. Before the introduction of vaccination the annual mortality from small-pox in the metropolis ranged from 400 to 500 per 100,000 of the population. Since its introduction the mortality has been so largely reduced that during the twenty years 1854-73 (including the epidemic under consideration) the average annual rate of mortality has been reduced to 24. So remarkable had this diminution been that it was suggested that it depended, not upon vaccination, but upon a gradual declension in the diffusibility and fatality of the disease. The epidemic of 1871-72 has fully proved that this is not the case, and that natural small-pox has lost none of the virulence which it displayed in the past century. But notwithstanding the remarkable virulence of the epidemic last past, the mean annual death-rate from it in the metropolis did not exceed 148 per 100,000. This shows how very real is the protection afforded by vaccination against small-pox, even when the measure is discredited by the large amount of imperfect and inferior vaccination which exists in this country.

Thus much, then, as to the general practical lesson derived from the epidemic of 1871–72. As to particular teachings of the epidemic, three of special interest need to be insisted upon at the present moment. The first of these teachings refers to revaccination. The experience of the epidemic showed, in a most marked manner, that by *thorough revaccination after puberty practically absolute protection against small-pox was secured.* The remarkable example of the attendants in the different small-pox hospitals in London, upwards of 300 in number, is an instance in point. In no single instance did small-pox occur, after efficient revaccination, among the attendants, who were in constant association with the sick. Indeed, revaccination proved a more effective protection against the contagion of the disease than previous small-pox, even when severe. Under the ordinary conditions of prevalence of small-pox in this country good vaccination in infancy will certainly secure the individual throughout life against small-pox, except in a comparatively small number of persons. But in the presence of an unusual epidemic similar to that last past, even this exception becomes an important item in the local conditions of prevalence of the disease. The experience of the last epidemic served to show that the rule for revaccination after puberty, in order to eliminate this element of danger to the public and to the individual, needs to be even more strongly insisted upon than heretofore, *as well in the case of persons well-vaccinated in infancy and childhood as in those ill-vaccinated.*

The second teaching of the epidemic referred to relates to the adequacy of the existing public arrangements for vaccination to limit the spread of small-pox when introduced into a place, if duly and energetically carried out in accordance with the regulations for the purpose laid down by the Local Government Board. The affirmative evidence adduced by Dr. SEATON on this question appears to us to be quite conclusive, and it cannot be too clearly understood how great a responsibility rests upon the local vaccination authorities in this matter.

The third teaching from the epidemic refers to the provision of hospital accommodation for the isolation of cases. The evidence on this point is not nearly so complete as could have been desired, as in the epidemic last past the disease was in full swing in most places before hospital accommodation was provided. But the data got together by Dr. BUCHANAN from London, Birmingham, and Coventry, and other data since available from Plymouth and Devonport, show very clearly that an abundant provision of hospital accommodation, by the facility thus given for the isolation of cases at the *beginning* of an outbreak, exercises a very

important effect in controlling the subsequent course of an epidemic.

Now, having this experience, it will be discreditable to the vaccination and sanitary authorities in the metropolis—the boards of guardians, the vestries, and the district boards,—so far as public vaccination, the provision of hospital accommodation, and general sanitary measures are concerned, if the public do not reap the full advantage of it. This is a matter, however, in which the public would do well to remember that their local representatives will not betray more anxiety on the subject than they do themselves. An indifferent local authority presupposes an indifferent community. Moreover, it must be remembered that the chief incidence of the coming epidemic will be upon children under three months of age, and upon the still unexhausted material of imperfectly vaccinated and unvaccinated people above the age of puberty. Both these classes stand outside the limit of compulsory law, and their protection must rest with the action of the public themselves. Through the increasing efficiency in the execution of the Vaccination Acts the children born since the last epidemic, except such as are now under three months of age, are in a great measure safe from the epidemic. This the compulsory law of vaccination has secured. For the rest, the magnitude of the coming epidemic will depend upon the action taken by the general public and its local representatives, and the Legislature has provided abundant facilities for such action being efficient.

IN many other departments of study distant but significant rumours have been constantly heard of late, that the tutorial system was not everything that it was supposed to be by its earlier advocates, and intimations of the same kind appear in those introductory addresses of the 2nd inst. which were delivered by the younger teachers at our metropolitan medical schools, and who should, therefore, be especially conversant with the present style of teaching. We are old enough to remember the very opposite lament: lectures were too numerous, they had been tried and found wanting; there must be a more direct and personal relationship between the teacher and the learner, and the tutor must supplement the professor, for the latter can only be a guide and signpost, and can aid the student but little in his onward journey to the portals of our profession. These complaints became so general that a new class of teachers soon sprang into existence to initiate and carry out the new system, and "grinders" or "crammers" became quite fashionable, and were resorted to by all except, perhaps, the most studious of pupils. The latter often failed under examination when less capable men were successful, and so the medical schools were forced, in self-defence, to institute similar classes under the supervision of a medical tutor—a "coach" under another name. Now the system has become so thorough and complete, that not only have subordinate teachers, like tutors and demonstrators, taken to this mode of instructing their pupils, but every student, intelligent or dull, industrious or idle, is urged by every available inducement to attend such classes. Professors and lecturers introduce the essential characteristics of the system into their lectures, and hence these in most cases now bear but a very faint resemblance to those given in former times. That this great change does not stop here is also strikingly manifest if we contrast the medical text-books now issuing from the press with those that were in the ascendant only ten or fifteen years ago. We will take as an example Sir THOMAS WATSON'S most excellent "Lectures on the Principles and Practice of Physic," and compare it with Dr. ROBERTS'S "Handbook of Medicine," or even the new treatise on Medicine by Dr. BRISTOWE: the former essentially professional, scholarly, and interesting; the latter tutorial, dry, classified, and statistical. The tutorial method of teaching is so very prevalent and the manuals essential to its success are increasing so rapidly, that it is due time for us to consider the relative advantages and disadvantages of the two systems, and to what extent each can be relied on and trusted for the due *education* of the medical student. We have no hesitation in saying that they should both be combined, and that here, as in so many other instances, a medium course is undoubtedly by far the wisest. That the tutorial plan has special advantages for the weaker class of students is beyond question; for, in the first place, a lecturer well versed in his subject and its higher capabilities and bearings is often urged beyond the ken of his hearers, and many industrious men are disheartened by ineffectual attempts to keep up with and understand him. They consequently give up work altogether, and step by step drop amongst the residuum or "bye-product." Other lecturers, who year by year repeat the same subjects in words ever the same, disgust the listeners with their wearying reiteration. Another consideration, too, is that students enter medical schools at a much earlier age than was formerly the custom; they are fresh from school, young, impulsive, accustomed to the tutorial method, but little trained in the exercise of their reasoning powers and ill prepared to follow day by day a systematic course of lectures on unfamiliar subjects. Moreover, the system of examinations in vogue favours in every respect the acquisition of mere facts and a reliance on the memory, rather than a maturing of opinion. Such causes being in active operation, we can easily understand the reasons why the tutorial system has been so much fostered and encouraged of late years, partly by the competition among teachers for good results at examinations, and partly by the demand for it among the students themselves. Its most conspicuous disadvantages are that it neglects and stultifies the reasoning capabilities of the better class of learners, and pays no attention to the development of those qualities which are so essential for the proper fulfilment of the after-duties of our profession. In fact, the tutorial system enables many candidates to pass who would not otherwise obtain an entrance into our ranks, whilst its abuse tends greatly to lower superior intellects to the dead level of the majority. In what manner, then, can its benefits be retained, whilst the harm of its excessive employment is restrained? The first suggestion that we would offer is, that medical pupils should be classified. No attempt of this kind has as yet been made, but we are strongly inclined to think that the day of its inauguration is not far distant, and that the regulations of our governing bodies, which stand in its way, must ere long be annulled. The pupils who, having had

some scientific or technical training before their entrance at a medical school, or having been diligently at work therein for some time, have had their best energies called forth, and their modes of thought well directed and strengthened, will gain most from the professorial method; whilst those who enter straight from school, unaccustomed to think for themselves, and without the slightest conception of the "scientific mind and scientific methods," will derive every benefit from a short but judicious course of tutorial instruction, after which they will be much better fitted for the due appreciation of the advantages of a good lecture system in the attainment of the higher medical education. In the larger schools there would be no practical difficulty in delegating the novices to the care of the junior teachers, for the teaching staff is necessarily very large, and the appointment of even its youngest member is generally entered on with much care and judgment, since, once made, it is almost irrevocable. For the more advanced students the professorial method is undoubtedly the better. We must deprecate as strongly as possible the plan, which we fear is much too common, of keeping senior students in leading-strings, and sending them up to the examining bodies charged with "tips" and the most recent book-lore. Although we have no doubt that this *pays*, yet it is difficult to over-estimate its deleterious effect on the mind, and we cannot help protesting against the modern system of holding and advertising classes for drilling into the medical student every detail of his profession, from his entrance into a medical school to his exit therefrom to enter on the responsibilities of a duly qualified practitioner. Moreover, the tutor who faithfully discharges his duty will look to the future rather than to the present, and will do everything that lies in his power to inculcate the necessity of, and to secure, the employment of the pupils' reasoning faculties, and will not content himself with considering their minds as receptacles for the storing up of bare facts, to be brought out as occasion may require. Examiners also can do much to stop wholesale cramming by really applying themselves to investigate whether the candidate possesses an intelligent capacity and the mental requisites for the best type of medical practitioner, instead of spending a limited time in the barren task of discovering how much cram-work and book-knowledge has been put into him. Unfortunately, it is very difficult to find out in a short space of time whether the examinee fairly and intelligently appreciates the great principles on which our science and art are based, and examiners are much too prone to substitute for this a mere superficial inquiry into his acquaintance with a few details and isolated methods of practice; and, as in many cases they have not had the advantage of a previous acquaintance with the powers of the candidate, erroneous judgments are not unfrequently formed, to the astonishment of the candidate himself, and the surprise of his teachers, who are far better able to vouch for his ability.

WE have at length received detailed accounts of the operations of the National Aid Society in the East. Colonel LOYD LINDSAY and Mr. MACCORMAC in *The Times* of the 14th instant, and Mr. MACCORMAC in THE LANCET of last week, have given, generally and professionally, so complete an account of what has been done to relieve the wounded on both sides, that little more remains to be told.

Before the Society commenced any active operations six surgeons—namely, Mr. MCKELLAR, and Messrs. ATWOOD, HARE, SANDWITH, HUME, and BOYD—had been sent out by the Eastern War Committee. This Committee subsequently amalgamated with the Society, and at the end of August Colonel LINDSAY, as the chief emissary of the latter, and accompanied by Mr. MACCORMAC and Messrs. LESLIE, WHITE, and BROCK, left Belgrade for Alexinatz, joined the staff of the Eastern War Committee, and commenced their labours immediately after the battle of the 1st of September. As it appeared to be universally the plan to send all the wounded to the rear as quickly as possible, the establishment of a large head-quarters hospital was of course the chief care and concern of the Society's representatives. Baron MUNDY, who has throughout the war been most active and energetic, recommended as a site Lubicevo, near Poseravac, and about an hour and a half from a chief steamboat station on the Danube. Belgrade was, however, eventually chosen, and here, with the assistance of Mr. WHITE, the British Consul, Dr. PETROVITCH, and others, a hospital was equipped for 100 or 150 beds, which was left in charge of Mr. MCKELLAR. The party then proceeded to the Turkish lines by way of Widdin, reached the head-quarters of the Turkish army at Nish on the 12th of last month, and arrived at the Alexinatz camp on the 15th, where, after an interview with DR. VOULCOVITCH BEY, the principal medical officer at the Verband Platz, arrangements were made for the establishment of two hospital tents, and Messrs. LESLIE, PITTS, WHITE, and BARKER were left in charge of them. The staff of the Society (i.e., Colonel LINDSAY and Mr. MACCORMAC) then proceeded towards Constantinople by way of Pirot, Sophia, Tatar Bashardjik, and Adrianople. Arrangements were made for the establishment of a reserve hospital at Sophia in some disused offices of the Railway Commission. Drs. FANO and TAKVORIAN gave valuable assistance, and three English surgeons, as well as a quantity of blankets and other stores, have been sent there from Constantinople.

This is, quite in abstract, the sum of the work up to the present time organised by the National Aid Society. Those interested in the subject will, on analysing Mr. MACCORMAC's simple but graphic account, published in THE LANCET of the 14th inst., see pretty plainly that the chief obstacles to contend against in all parts of the Turkish Empire are dirt and difficulties as to locomotion. The dirt, here, there, and everywhere, in the interiors of inhabited houses, including khans, hospitals, and other places of public resort, must be seen, felt, and smelt, for no ordinary descriptive powers can do it justice. There are in Bulgaria Turks, Greeks, Bulgars, and often Circassians, living in all towns of any size, each race having its distinct "quarter." The Bulgar quarter usually carries off the prize for filth, but all are indescribably dirty, and the Greek quarter is the only part of the town that can be dwelt in at all comfortably by an Englishman. After much experience in many parts of the world, we may assert without fear of contradiction that the districts of Turkey between the Danube and the Black Sea are, as to human habitation, more repulsively nasty than any other quarter of

the civilised globe; and, in times of war, of course, all these conditions are aggravated. The means of locomotion, too, are inconceivably bad. There are no roads worthy of the name, except, indeed, one that stretches across the Dobrudscha from Varna to Rustchuk, and cannot be used, as in its construction levels were utterly ignored. The only practical means of locomotion is on horseback, so that no assistance can be usefully rendered to the wounded in times of war until this great obstacle is fully appreciated, and to some extent surmounted. It must be remembered, too, that though in the neighbourhood of the Danube water carriage may be employed, it is of comparatively little use without steam power, as the current is both rapid and treacherous at most times of the year.

Annotations.

"Ne quid nimis."

GULL v. JOHNSON.

THE Censors of the Royal College of Physicians have addressed a letter to Sir William Gull, containing the expression of their opinion of the matter between him and Dr. George Johnson, which, it should be remembered, was brought to their notice by the complaint of Sir William Gull. Although a copy of this letter has been sent to Dr. Johnson, no official publication will be made. The substance of the decision of the Censors is, however, very generally known, as indeed it should be. The Censors have confined themselves to the consideration of the question of professional etiquette from the College point of view, and not of the estimate of the allegations made by Sir William Gull at the recent Bravo inquest.

Although the Censors have evidently desired to smooth matters as much as possible, they have not shrunk from grappling with the matter in dispute. In the first place, they naturally express regret that a public contest of opinion should have occurred between two senior and distinguished Fellows of the College, and that, when it did occur, measures were not taken to settle the differences by mutual conference, without reference to the Censors. Secondly, the Censors agree that an ordinary perusal of the reports given in the daily papers would be likely to give rise to the belief that Sir William Gull's evidence was calculated to prejudice Dr. Johnson's position in the case. Thirdly, the Censors regret that Dr. Johnson did not communicate with Sir William Gull before giving his second evidence, in order to afford this gentleman an opportunity of publicly repudiating the interpretation that had been put upon his words. Fourthly, the Censors remark that Dr. Johnson's evidence indicated considerable warmth, and was such as might naturally give offence to Sir William Gull; but they do not think that there was any desire to impugn the veracity of Sir William Gull; and they further believe that Dr. Johnson was led to give his second evidence from a sense of public duty, and in self-defence to correct and supplement some of Sir William Gull's statements which seemed calculated to throw discredit upon Dr. Johnson and the medical men who had acted with him. Fifthly, the Censors complain that portions of Sir William Gull's evidence were "very objectionable" and open to misinterpretation, but they state that they do not think there was any intention to disparage Dr. Johnson. Sixthly, they condemn Sir William Gull for seriously infringing at least the *spirit* of the bye-law that relates to the conduct of Fellows in consultation—an infringement which has led to consequences which they designate by the very strong term "disastrous."

We understand that by mutual consent the two physicians have agreed that the unfortunate difference which has existed between them shall now terminate, so far as they are personally concerned.

THE CHAIR OF PHYSIOLOGY IN GLASGOW.

THE appointment of Dr. McKendrick to the Chair of Physiology in the University of Glasgow, which, through our correspondent, we announced early (somewhat to the surprise of the local press), has excited a great deal of dissatisfaction in Glasgow, which will not be shared out of that city. Dr. M'Kendrick's reputation as a physiologist is admitted everywhere, and all who wish to see the University of Glasgow fortified will rejoice in his appointment. He has not only done some excellent physiological work, but he is of such an age as to be likely to keep up with the subject which develops with such rapidity. We note with regret that this appointment, occurring at the time of a vacancy in the Parliamentary representation of the Universities of Glasgow and Aberdeen, is being turned to political uses. We shall not be suspected of any political bias in favour of the present Government, which has so grievously fallen short of its promises in regard to sanitary legislation, but to us it seems that this appointment really reflects great credit on the Government. It cannot be considered a politic act, when the Government wishes to stand well with the Glasgow University constituency, to appoint an Edinburgh teacher. We are therefore shut up to the conclusion—incredible as it almost seems in these political days—that the Government have actually had the courage to do an unpopular thing in order that it might do a right thing. We are for once simple enough to believe that the Government has acted on the principle of choosing the fittest man in the highest interests of the University, and at which we are heartily glad. A Professor of Physiology chosen on political principles would have been simply ruinous. Whether such an act of merit on the part of the retiring Lord Advocate entitles his successor to support is another question. We cannot get up any enthusiasm of partisanship as between two legal candidates, who will not reform law, and cannot represent medicine. But we repeat that the election of Dr. M'Kendrick is an act of merit on the part of the Government for which it deserves the thanks of all who wish well to the University of Glasgow and to the teaching of physiology in Great Britain.

DANGER FROM INFECTION.

AN illustration of the amount of circumlocution in which the removal of a patient infected with a contagious disease to a hospital is involved is furnished by Dr. Whitmore in his last monthly report of the health of Marylebone. The sanitary inspector is informed of a case of scarlet fever, he visits it, and finds a child in bed suffering from the disease; the family has only one room, and there are probably three or four other children. He calls upon the relieving officer of the district, who is from home and does not visit the case until the next morning. He in his turn calls upon the district medical officer, whose certificate is required to obtain the patient's admission to the hospital. The doctor happens to be out visiting his patients, and consequently a considerable delay ensues before the sick child is seen by the doctor. The infection in the meantime spreads. Such a delay is no doubt often serious and even fatal, and we think the managers of the asylum hospitals might relax to some extent the rule prescribing that no person is to be received into the hospital without an accompanying certificate from a district medical officer. It would be better to receive even

a doubtful case than let the patient remain in his house to infect those around him. At the same time it should be known that parents and householders have certain means of immediate removal in their hands. If an order be obtained early in the day from the relieving officer, it happens but seldom that the patient is not visited by the medical officer in the course of the morning. The real difficulty to be overcome is the remarkable antipathy entertained by one section of the public against the asylum hospitals, and until they can be brought to see the advantage to themselves secured by immediate isolation, it will be impossible to provide against perilous delays of the sort we have described. At the present juncture, when we are threatened with a serious visitation of a loathsome disease, it behoves all who understand the danger which is entailed by the suppression of the occurrence of one case of communicable disease, to exercise the utmost promptness in dealing with an infected person. School-board teachers and officials should especially be vigilant and careful in their supervision over the pupils under their care, while medical officers of workhouses should closely examine all children about to be sent to one of the various district schools.

FOOTBALL.

THE football season has only just commenced, but we have received notice of two serious accidents which already have occurred to players. One happened last Saturday at Rugby, when Mr. Gilbert, a member of the town club, in endeavouring to stop an opponent, who was running with the ball, was knocked down and had his collar-bone broken. That Mr. Gilbert was seriously injured we have no doubt, for we learn the game was immediately discontinued. This accident illustrates also the danger of "picking up," which is such an objectionable feature of the game as played according to the Rugby rules, and on which we have so frequently commented. On the same day as the Rugby accident another occurred at Woolwich, in which a gentleman was so seriously hurt that he was obliged to retire from the game. We were accused last year of endeavouring to argue this question on the "narrow issue of an exceedingly small percentage of accidents." But is the percentage of accidents so small as the defenders of the Rugby game maintain? In our columns, within eighteen months, we have recorded at least three deaths, and not long ago we published the list of accidents occurring in one club alone during a single season. The accidents comprised the following serious injuries: (1) a broken thigh and leg, (2) a dislocated collar-bone, (3) a broken collar-bone, (4) some serious internal injuries, (5) broken bones of ankle, (6) grave injury to knee-joint. Such serious accidents occur almost entirely under the "Rugby" rules. The game played according to the Association rules is comparatively free from danger. There is none of the garotting, scrimmaging, legging, and tripping which form the main features of Rugby play. The Association game is one of skill, not of brute force. For boys perhaps the Rugby game is not so dangerous as it is for grown men; we do not hear, for instance, of so many actual fractures occurring, although we believe that the severe struggling and prolonged scrimmaging is too great a strain on young and growing frames, especially if there be any delicacy of constitution. With respect to men the Rugby game is especially dangerous. After twenty, men fall heavily, and have not the elasticity that boys have; and, above all, they are more liable to sustain visceral injuries. Two of the deaths recorded last year in our pages were from this cause, and in both the fatal injury was received during a scrimmage. It is objected that under the Association rules the game loses its interest. But surely the captains of football clubs might devise some modification by which the best points of each set of rules might be adopted in a new code. Some attempt to diminish the percentage of accidents which annually occur, however small in number they may be, is worthy of serious consideration.

LIFE ON THE CROZETS.

AN especially interesting narrative to the general reader, and also containing many features of professional importance, is to be found in last month's number of *Blackwood's Magazine*. The *Strathmore*, whilst on a voyage from London to Otago, struck on one of the Crozet group of islands on July 1st, 1875. Forty-nine of the crew and passengers got shore, amongst whom were one lady, Mrs. Wordsworth, and one little child three years old, named Walter Walker. The account of their life on this dreary and barren island for six months and twenty-two days, is most simply but graphically described in two letters by the lady and her son. It is one of the most affecting tales of human endurance that has ever been written; and the fact that a lady who had been suffering from sea-sickness during the whole passage, complicated with "low fever" in its latter part, should have survived such extreme privations, whilst many of the able-bodied men succumbed, is most important in a medico-legal aspect. The only stores that were saved were "some cases of spirit and a cask of port, some bottles of pickles, a few blankets, spoons, and forks, two kegs of gunpowder, two parasols, a small cleaver, a bucket or two, one tin of preserved meat, some wood, and a few odds and ends." After two nights' exposure in an open cave, they lived for months in a shanty, into which thirty were crammed, lying in tiers on and between each others' legs. A second shanty was afterwards built; and finally the lady and her son found a new abode, which, though called Penguin Cottage, was not very inviting. This cave was made by building a turf wall against a slanting piece of rock. It was four feet high and four feet long, with a shelf on the rock, three feet wide by five feet long, to serve as a bed, and even this was always wet. The food at first was the flesh, or a soup made from the flesh, of albatrosses and mollyhawks, the latter a carrion-bird. The only vegetable was a sort of moss, but good water was in abundance, and they managed to keep a fire alight. No wonder, with such a diet, that the lady suffered from diarrhœa and dysentery, which reduced her to a skeleton; but the mollyhawks began to lay eggs after she had been on the island a month, and these saved her life. As time passed on, other sea-birds, especially penguins, visited the island, and food became more plentiful. During the seven months there were only three fine days, and the weather was very severe. "It was nearly always blowing a gale, with snow, hail, and rain to make it worse, and our inner man indifferently replenished." The poor child died on Christmas-day, thin, wasted, and covered with sores, and others died at various periods from tetanus, diarrhœa, and exhaustion. The eggs saved the lives of the forty-four survivors, for those who had been ill, miserable, and haggard, became quite plump and fat, and Mrs. Wordsworth even was able to move out and fetch water. But as the months ran on, the birds disappeared, and the supply of eggs was exhausted. Mrs. Wordsworth could not eat the bird-flesh, so that she could scarcely have lasted much longer, when they were rescued on January 21st, 1876. Although Mrs. Wordsworth was liable to rheumatism, neither she nor any of the others, though always exposed to wet and cold, suffered from this affection, which Mr. W. attributes to the ammonia in the guano. The difference between the conditions of hope and despair in increasing the prospects of survival, even under such untoward circumstances, was strikingly exemplified. The quartermaster gave "himself up from

the first," and died on October 20th; whilst the lady writes, "Ill though I was, I felt that I *couldn't* die on that desolate island." Another interesting medico-legal point was that the skins of all became quite fair, and their hair of a lighter colour—black hair turning brown or red, and fair hair flaxen.

STAG-HUNTING OR VIVISECTION?

WHETHER to rear and train a timid animal like the deer with a view to its being hunted and worried for an hour or more by a pack of bloodthirsty and ravenous dogs, for the mere gratification of a love of display and a passion for sport—which in no real, manly sense is sport at all—be less cruel than to put an animal to some necessary pain for the sake of obtaining knowledge essential to the health, perhaps the life, of man, is a question which may be fairly pressed on the attention of stag-hunters and the thoughtful public just now. A notification like that which appears in the daily papers to the effect that the Royal pack met a large field at ——, that the deer was uncarted by 10 o'clock, that it ran fast for an hour and thirty minutes, that "an excellent morning's hunting was enjoyed," but the weather being warm the going was "very trying both for riders and hounds," records a proceeding little short of wanton inhumanity, wholly needless, and scarcely even excused in the eyes of society by the transient pleasure it affords. Looking to the nature of the creature hunted, a ride after a tame cat would be more noble, and involve less torture. The deer is so gentle and helpless, so unable on account of its size to take refuge from the hounds when finally exhausted, or for a brief respite in the run, and so entirely at the mercy of those flesh-eating animals when reached, that no man with a spark of humanity in his nature can fail to feel the humiliation of participating in such "sport." The fox-hunter has for his quarry a predatory and cunning foe to the farm-yard, well able to take care of himself. The harrier pursues a creature which has been gifted by nature with a subtle power of eluding its pursuers, and enjoys a reasonable chance of escape. There is "law" for both these descriptions of game. There is even a chance for the wild deer in the forest; they know the country, and are, so to say, at home. The Royal stag is an animal purposely fed, nursed, and trained for the ordeal of periodic torture, that a few hundred gentlemen may enjoy a morning's ride, and beguile their self-consciousness with the delusion that they are *hunting*. It is time this fashionable amusement, together with the shooting of trapped pigeons, the wholesale mangling of tame pheasants, and other practices miscalled *sport*, had the consideration they claim, and, on account of the needless and useless pain inflicted, received the censure and contempt they deserve.

THE PRINCIPLE OF COMPENSATION FOR INFECTIOUS DISEASE.

A VERY important principle was brought to light in the little incident mentioned in a paragraph of THE LANCET last week, under the head of "Small-pox Compensation Case." A man named William Grant, of Accrington, had a lodger afflicted with small-pox. Grant was advised by the medical officer of health to stay from his work for fear of conveying the disease. He also sent his family away, and attended to the sick man. For all this he made demand of the Board of Accrington for compensation in the modest sum of £5, and £2 8s. worth of bedding. The Board of Accrington, after discussing the matter, ultimately resolved to award the applicant £3, in addition to replacing his bedding. The award is not very great, but the principle upon which it has been granted is one that must have a much larger recognition than hitherto. The man Grant here was acting under the advice of the medical adviser of the Local Board. He was acting with the purpose of limiting the conveyance of the disease, and though it is doubtful whether any law exists by which this man could either have been compelled so to restrict his movements, or by which he could have compelled the Local Board to compensate him for voluntarily restricting them, he and they are not the less entitled to credit in the matter. As the mere landlord of a lodger he was apparently far less responsible than a parent or near relative of a person afflicted with small-pox. But he did what was right, and the Board would have been acting reasonably if they had allowed him a larger sum than they did. Some of these days we shall have claims made at common law upon those who knowingly convey the germs of disease to others. If ever a claim is strong in law or equity it is this. If people will indulge in the luxury of having the small-pox nowadays, when, by revaccination, it can be almost absolutely prevented, they should be made to pay damages to all those to whom it can be made clear that they have carelessly conveyed the disease. But there are other cases in which the conveyance of disease is almost equally clear, and almost equally criminal,—such as cases of typhoid arising from the use of water known to contain typhoid poison, or scarlatinous poison. Of late there have been various instances in point where weeks of illness, or, perhaps, death, has resulted from the selfishness or carelessness of those in charge of infected persons, or infected articles, including water, and we hope soon to have it recognised as an established principle in law that such persons are liable in damages for such heartless conduct.

THE POLICE REPORT OF THE COMMON LODGING-HOUSES, 1875.

WE have already complimented the police sanitary inspectors on the energetic manner in which they have carried out the Act of 1851 in respect to the supervision of the common lodging-houses of the metropolis; and in a recent report of our Commissioners, though finding it necessary to point out that a good many defects still are to be found in the common lodging-houses of London, yet even the worst of them, when compared with the crowded, filthy, dilapidated, and often pestilential houses by which they are surrounded, are undoubtedly superior, and "we are constrained to wish the parish authorities were even half as energetic as those of Scotland-yard in carrying out the work of sanitary inspection." Colonel Henderson's report for 1876 is now before us, and a brief abstract of its contents will show how important is the work of the police in this respect.

The whole area under supervision is 122 square miles, containing 1241 registered common lodging-houses, with a population averaging 27,000. During 1875 sixty-nine deaths occurred in the common lodging-houses, as corresponding with exactly the same number in 1874. In the latter year fifty of these were "sudden deaths"; last year the deaths in this class had increased to fifty-nine. We should be pleased to see fuller details given as to these sudden deaths; a tabular statement of the verdict given in each case would be interesting. How many of them were fatal terminations of some ordinary illness brought on by sheer neglect? Eighteen cases of infectious disease have arisen in these lodging-houses during the year; but in addition to these, fifteen cases found their way to the Fever Hospital, neither the keepers of the lodging-houses nor the inspecting officers being made acquainted at the time that these people were ill when they left the premises. These cases generally came under the notice of the medical officer of the district, and, being destitute, were sent to the Work-

house Infirmary till the disease declared itself. The fact that so few cases of an infectious disease have occurred amongst so great a number of persons so closely herded together shows that the requirements of health in these places are, on the whole, very successfully carried out, though it is evident that, without the strict supervision that is enforced, the common lodging-houses would quickly become active foci of moral and physical pestilence. The evils arising from overcrowding in the dwellings of the poor are fully treated of in this report. The sanitary inspectors have made every effort to abate the nuisance, but, owing to the smallness of the staff and extent of their duties much time cannot be given to the suppression of the overcrowding of private dwellings. Indeed the police have no legal power to inspect such houses, unless the nuisance authority has neglected its duty. Considerable improvement, however, has been made during late years in the whole of the parishes of the metropolis with respect to sanitary matters. There is a better supply of water, and a more frequent cleansing of the courts and alleys. It appears that in many cases the people only want to be shown what cleanliness is to adopt it. "In many instances officers of the Common Lodging-house department have pointed out clean and well-kept rooms as examples to the occupiers of dirty ones, and on a second visit have noticed great improvement in those they had previously to complain of." In dealing with cases of overcrowding the police have most difficulty with houses which are let out in single rooms to families, the filthy habits of the people and neglect of the landlord combining to render both rooms and houses dirty and unhealthy. Colonel Henderson strongly urges that all houses let out in single rooms should be brought under the provisions of the Act.

INJECTING THE MALE BLADDER WITHOUT THE AID OF A CATHETER.

FOR the last year Prof. M'Guire, of Virginia, has made use of the following simple procedure in injecting the male bladder. He takes the ordinary rubber-bag syringe used to inject the bladder through a catheter, the nozzle of which is provided with a stopcock and tapers to a point. The bag is filled with warm water, all the air being carefully excluded, and the nozzle oiled and introduced into the urethra for an inch or an inch and a half. The urethra is then gently compressed around the nozzle of the syringe, the stopcock turned, and, by gentle and continuous pressure on the bag, the water is forced along the urethra into the cavity of the bladder. It is important to avoid all rough manipulation, and to inject the fluid slowly; with a little practice the patient can perform the operation quite readily himself. This method of injecting the bladder is especially applicable to those not infrequent cases in which the introduction of a catheter causes pain or urethral fever. The warm water may be medicated, but it is important to remember that the mucous membrane of the bladder is more sensitive than that of the urethra, and consequently these injections must be milder than simple urethral injections would need to be. Prof. M'Guire has employed this method with advantage in a case of malignant vascular tumour of the bladder, and preparatory to the operations of lithotomy and lithotrity. In a case of severe cystitis following the first of a course of lithotrity sittings, distending the bladder with water by means of the bag syringe was followed by such immediate and great relief that Prof. M'Guire was able in a few days safely to employ the lithotrite again. In a case of severe strangury the same proceeding gave almost complete and immediate relief. It is, however, in cases of cystitis and enlarged prostate that Prof. M'Guire anticipates most benefit from this method of injecting the bladder. In such cases the introduction of the catheter and its necessary retention in the bladder for some minutes often cause urethral fever and increased irritability of the bladder, that more than counterbalance the good the injection may have done. The frequent introduction of the catheter, moreover, in cases of chronic hypertrophy of the prostate, undoubtedly has a tendency to increase the already existing trouble. In these cases the bag syringe can, with few exceptions, be substituted for the catheter. Four or five ounces of warm water, simple or medicated, are to be injected and retained for a few moments, and then expelled. What will remain in the bladder will be, not the phosphatic irritating urine that was there before the operation, but a small portion of this diluted with the water. By repeating the injection the residual fluid can be made entirely unirritating.

AN UNSCRUPULOUS CRAZE.

SOCIETY throughout its component classes is wondrously blind to the machinations of crotchet-mongers. They are permitted to go about tearing up the foundations of our social life, perpetuating its evils, undermining the measures taken for its safety, and laying trains for its destruction; and the sense of tolerance is so strong in the English character that the wise few only shake their heads and the careless many smile. There is grave reason to fear that we are about to reap some of the fruit of this impolitic forbearance in the form of a visitation of small-pox. The crazy and selfish opponents of vaccination have been indefatigable, and now they are unscrupulous. They have been working in secret to prevent the carrying out of the Compulsory Vaccination Acts; and having, by their influence with the weak-minded and ignorant, succeeded in securing a *nidus* for the disease in many of the most populous districts throughout the country, they have the impudence to turn round and tell the people vaccination has failed, pointing to the occurrence of this self-wrought epidemic as a proof of the assertion. No reasonable man or woman is likely to be misled by the statement, and probably no dupe of the infatuated clique will be convinced by anything we can urge to the contrary. Nevertheless it is a duty to point out that every refusal or neglect to obey the law is a crime against the community. "A man may do what he likes with his own"; but when what he does or leaves undone exposes not only his own family but his neighbours to the infection of a loathsome disease, which, were it not for his lawless selfishness, would long ago have died out, society has a right to interfere. We think the time has come to deal with these anti-vaccinators, not as harmless lunatics, but as dangerous maniacs, whom, for the safety of the population, it is necessary to restrain.

THE LONDON FEVER HOSPITAL.

THE honorary secretary of this hospital, in a letter that appeared in *The Times* of the 18th, very properly calls attention to the fact that a considerable amount of accommodation exists at the Liverpool-road institution for cases of contagious and infectious diseases. And, referring to the discussion which took place at the meeting of the Metropolitan Asylums Board on Saturday last, it is precisely the kind of accommodation that is now specially needed throughout the metropolis. For it was remarked at this meeting by Dr. Brewer, Dr. Bridges, and others, that the hospitals of the Metropolitan Asylums Board were in many cases improperly occupied by persons who are not of the pauper class, who can afford to pay, and who do pay for their maintenance while in hospital, but who are nevertheless sent to these institutions by medical officers of health and others. It appears, too, that a section of the Public

Health Act of 1875 directly favours that objectionable line of action, and so complicates considerably the work of the managers. It seems to us that the existence of the London Fever Hospital affords a ready solution of this difficulty. We suggest that all cases sent to the hospitals of the Metropolitan Asylums Board that cannot be classed as paupers should be at once referred to the Liverpool-road Hospital. Indeed, it appears strange that the merits of this institution, as a middle-class hospital for the reception of fever cases, appear to be so little known, or, if known, so little appreciated.

UNWOMANLY WOMEN.

IT is reported that the King and Queen's College of Physicians of Dublin has determined to admit a woman—and, of course, women—to the licence. Other licensing bodies are expected to follow suit. The responsibility of thus throwing open the portals of the profession to a sex naturally disqualified for the discharge of its obligations must rest upon those who have the hardihood to take this irrational step. It is impossible to accord the respect claimed for "advanced opinions" to the promoters of this movement, because the majority of the men helping forward the "Woman's Rights" enterprise are obviously impelled, not by sincere approval of the concession made, but by a mixed feeling of spurious gallantry, and a desire to stand well with all classes, and to be prepared for every change in the direction of public opinion. We have no wish to be thus always on the winning side. We believe woman's work is to console and support man, not to usurp his functions. The question of competency and fitness apart, we think the loss entailed on society by success in this unseemly struggle to effect the entrance of women into a new sphere is likely to be so serious that it should be boldly deprecated and disallowed. Unwomanly women alone can aspire to unwomanly work. We regret the timid surrender of corporations responsible for controlling the policy of the profession, and we believe the time will come when, the facts of the case being seen in their true light, these pliable janitors will discover that they have not only lost the confidence of their brethren, but have earned the distrust of those they have thus helped into a false position.

SLAVE-TRADE IN THE CITY.

AT this time, when every feeling of humanity is shocked at Bulgarian outrages, it may not be out of place to call attention to atrocities that are daily occurring nearer home. From an indisputable authority and eye-witness, we have received the following letter, which exposes a state of things in the City of London disgraceful alike to the heart and head of some of our merchant princes. Our correspondent writes:—

"While attention is being drawn to the effects of occupation on health, I wish to bring to your notice the case of the entering-clerks in our large wholesale drapery or Manchester warehouses in the City of London. Many, if not most, of these clerks are lads fresh from school, of ages from fourteen years and upwards, the oldest among them being barely entitled to be called 'young men.' Their hours of business commence about eight o'clock in the morning, and only end when they have finished all their work at night, which in the busy season means one, two, three, and I have known it five o'clock on the following morning. It might be imagined that these long hours command large remuneration, which, judging from their great wealth, the employers of this child labour can well afford to pay. Quite otherwise; for the important services that cost them so much—health, strength, and often life itself—the youthful labourers work in most houses for merchant princes a three or a five-years' apprenticeship for nothing except their board and lodging. But it might be supposed that, at any rate, the entering-rooms where such long hours of labour are endured, are properly constructed and ventilated. Not at all; many of them are underground, most of them very draughty, the majority extremely close, especially after the gas has been burning long, which in many instances is all day, and nearly all of them filled with dust from the proximity of the packing-room. I met a poor little pale-faced lad this morning who was laid up a few weeks since with a bad cough. He is an apprentice at a first-class hosiery house in * * *-street, and on asking him how he was getting on, he said, 'All right; rather busy; we were working till two o'clock several nights last week.'

"Let those who may wish to verify these facts walk this week, about midnight, through the streets that lie between Fore-street and Cannon-street, including the south side of St. Paul's, with the back streets adjacent thereto, and they will find lights burning in all the large houses, especially in those parts where the entering rooms are situate.

"Sir, I need not point out to you the effect of such occupation on the health of lads and young men, but I ask, why should not the Factory or Workshops Acts be applied to our City warehouses? Why should it be possible for the millionaire to work any widow's son to death in this manner? for many of these young clerks are obtained from the orphan schools of the metropolis."

THE EPIDEMIC OF TYPHOID FEVER AT LINCOLN.

IT is not often that the evils of bad drainage are brought home so forcibly to the authorities, on whom the regulation of the sanitary state of a town rests, as in the case of the epidemic of typhoid fever which has just broken out at Lincoln. The early cases have apparently all been among persons of the middle classes, and the families of one or two members of the corporation have suffered. The death on Saturday last of a well-known and highly esteemed inhabitant—Mr. William Foster—cannot but convey a reproach to the Town Council, among whom he had for years laboured strenuously to supply the town with improved sanitary provision, but was overruled in his laudable efforts by an obstructive majority. A girls' boarding-school, where over twenty of the pupils were attacked, has been closed, and the inmates dispersed. The conditions of drainage and water-supply at Lincoln appear admirably calculated for the spread of the disease. Cesspools seem to abound, and have the excellent quality of not requiring to be emptied because they periodically empty themselves, their contents finding their way along a bed of limestone into the wells from which the drinking-water is derived! One highly contaminated well supplied a drinking-fountain in a public "arboretum." The Town Council, which is also the sanitary authority, has ordered the well to be closed. The carelessness which could allow a public drinking-fountain to be opened without ascertaining the quality of the water is very culpable. A scheme of drainage has, it seems, been arranged—not too soon. A letter appears in the *Lincolnshire Chronicle* from a member of our profession, who signs himself "Analyst," urging the importance of a sanitary reform, but needlessly and unwisely weakening his case by an exposition, fortified by quotations from German authorities, on the invariably specific origin of typhoid fever. The doctrine is still so far from proved that, in the opinion of some of our best authorities, the balance of probability is in favour of the spontaneous origin of typhoid fever. We would advise "Analyst" to turn from the speculations of Liebermeister to the clear and thoughtful address on the subject which was given to the Clinical Society by Sir Wm. Jenner in the beginning of last year. It is worse than useless, even if the doctrine is true, to impress on the public the notion that sewer gas or the sewage contamination of water will not cause typhoid fever as long as no germs of typhoid are present. The notion will only encourage carelessness and false security. Apprehension of disease is the

only lever by which the public can be brought to even tolerate sanitary reform which touches their pockets, and the lever is weak enough without needless weakening by unproved doctrines.

RACIAL CHARACTERS OF THE GERMANS.

FOR a long time the idea of a German, and especially of a German lady, was that he or she had blue eyes and fair hair. The Germans themselves have frequently protested against this sweeping assertion, and a careful examination of a German regiment, or of a German school, would have sufficed to show the strong admixture of black hair and brown eyes. Anthropologists, however, have continued to assert the correctness of their own views, till at last the public insisted on having the matter settled by a regular census, and on a certain day every school in Prussia had to make a return of the black and blue and brown colour of the eyes of the children. The results are curious. The number of persons examined in Prussia amounted to 4,127,766. Out of that number 4,070,923 were under fourteen years of age. In regard to the colour of their eyes 42·97 per cent. had blue, 24·31 per cent. brown eyes. With regard to the colour of the hair 72 per cent. had blonde, 26 per cent. brown, and 1·21 per cent. black hair. With regard to the colour of the skin Prussia had only 6·53 per cent. of brunette complexion. In Bavaria the brunette complexion claims 15 per cent., the black hair 5 per cent., the brown hair 41 per cent., the fair hair 54 per cent., and it is argued from this that the darker complexion in Germany came from the South.

THE QUANTITATIVE ANALYSIS OF THE BLOOD.

THE quantitative analysis of the blood has always presented great difficulties. Up to a very recent period it has been held that blood might be divided into two chief constituents, the red corpuscles and the plasma, the proportion of the white corpuscles being considered so small that it might be practically disregarded. Alexander Schmidt, however, showed that the amount of these last in living blood is much greater than might be supposed from an examination of the defibrinated fluid. They therefore require to be separately estimated; and there are thus three unknown quantities to be discovered. Formerly, again, it was regarded as sufficient to add the easily obtained fibrin to such serum as could be collected to estimate the amount of plasma present. We now know, however, that the problem is by no means so easy. Serum is not plasma *minus* fibrin, but plasma *minus* fibrinogen *plus* the products of disintegration of colourless corpuscles. G. Bunge, of Dorpat, recognising the changed mode in which the problem of the composition of the blood must be attacked, has endeavoured, in a recent article in the *Zeitschrift für Biologie* (B. xii., H. 2, 1876), to give a more accurate account than has hitherto been possible of this difficult task. The analysis of the blood must, he thinks, proceed from an accurate determination of the quantity and composition of the red corpuscles, that constituent which, on the death of the blood, alone preserves its chemical composition. When this has been ascertained, it is possible to determine the quantity and composition of the two other constituents. Now, the amount of the red corpuscles could be easily determined if the serum contained any particular substance which is absent in the corpuscles, and various practised chemists have held that chlorine and soda are two such substances. As both of them are very easily quantitatively determined, Bunge considered that it was of great importance to settle this point satisfactorily, and his first analyses have been made to prove that chlorine is exclusively contained in the serum, as Berzelius originally maintained. It is unnecessary to give the details of his mode of procedure; it is sufficient to state that most carefully conducted analyses of the blood of the horse, ox, dog, and pig showed that the red corpuscles in all instances contained chlorine, whilst, on the other hand, a marked difference existed between these animals in regard to the soda; for in the pig and horse the red corpuscles contain, as Berzelius originally stated, no sodium, whilst a certain, though small, proportion is undoubtedly found in the red corpuscles of the ox and dog.

QUARANTINE.

IT is a pity that this term, in which are included all sorts of sanitary regulations afloat, cannot be abolished altogether. The merest whisper of such a thing as quarantine creates unnecessary alarm, and its use as regards H.M.S. *Defence*, which had a case of choleraic diarrhœa on board, and put out to sea in consequence, did a great amount of mischief. As regards Gibraltar, we see it suggested by a contemporary that this fortress might be provided with a hulk, to which cases of infectious disease could be sent both from the garrison and the shipping. The suggestion is eminently worthy of consideration; for Gibraltar is a place at which such an establishment would be especially useful. In discussing port sanitary matters, it does not appear to be generally known that no local sanitary authority has any control whatever over Her Majesty's ships in commission, for there is a sub-section in the Public Health Act of 1875 that specially exempts them from all civil interference. Thus, for example, the local authority at Fiji had no real control over the movements of the ship that so unfortunately imported measles into the colony. Royal ships are supposed to, and in fact often do, quarantine—or rather "detain"—themselves on arrival at a port, by hoisting the yellow flag, and so indicating that some contagious or infectious malady exists on board. But, as a matter of law, if so disposed, they might run in among the shipping anywhere, and set at defiance all rules and bye-laws made by the Port Sanitary Authority.

DISSEMINATION OF DISEASE AT FUNERALS.

THERE is good reason to believe that disease is occasionally disseminated through the medium of funerals. We have at least one fairly authenticated instance in this country of diphtheria being diffused broadcast through the crowding incidental occasionally to the last ceremony. In America this question is beginning to receive much attention, and several cases have been reported of late where the transmission of the disease from the corpse seemed highly probable. The Suffolk District Medical Society sent out four hundred circulars to medical practitioners with a view to ascertain the opinion of the profession on the alleged danger of permitting public funerals of persons who had died from diphtheria. Two hundred and thirty-nine answers were received: of these 143 writers express a belief in the possible danger of contagion at such funerals; 17 believe that there is danger from funerals in the houses of the deceased, but none in churches; 29 consider that in the present state of knowledge there is no justification in prohibiting public funerals; while 8 record circumstances which occurred in their own experience confirmatory of the proposition that peril may ensue, but the testimony these latter advance is not quite satisfactory. The Society, after due consideration, recommend that funerals at the houses of those who have died of diphtheria should be private, owing to possible exposure to the poison of the disease. English physicians and sanitarians might well devote some time to the examination of this subject.

SUTURE OF THE SCIATIC NERVE.

IN the Address in Surgery to the meeting of the British Medical Association at Sheffield, Mr. Favell alluded to a remarkable case in which Mr. Wheelhouse, of Leeds, inserted sutures into the ends of a divided sciatic nerve, with apparently the ultimate result of obtaining union between the two portions and restoring functional continuity. The same operation has since been performed by Langenbeck, and the details are given in a letter from Dr. Du Pré to the *Journal de Médecine* of Brussels. The sciatic nerve had been divided two years before by a fall upon a knife. The limb was wasted, and the outer part of the foot and leg was anæsthetic. A longitudinal incision was made over the cicatrix, and the two ends of the divided nerve were found two inches apart and surrounded by a considerable quantity of cicatricial tissue. Each extremity was considerably enlarged, the upper more than the lower. A small portion of the lower extremity was removed and examined for nerve-fibres, to ascertain whether its degeneration was so great as to preclude hope of recovery. Finding that it contained nerve-fibres, the extremity of the central portion was removed, and, the knee being bent, the extremities were brought together and united by two ligatures of catgut, the wound closed, and the knee kept in the same position. The interference with the nerve was followed by no bad symptom, and two months afterwards, although there was no return of motor power, it was thought that sensation had improved, for the patient could indicate the place touched, where before there had been no sensitiveness.

SOCIAL SCIENCE CONGRESS.

THE Congress at Liverpool has now brought its proceedings to a close. In the Health Section numerous questions of pressing interest to the profession and the community came before the assembly for discussion, consideration of which we must postpone to a future occasion. Mr. Hawksley, C.E., delivered an address dealing mainly with sanitary legislation. Mr. Maddison read a paper on the treatment of juvenile offenders; Mr. Baldwin Latham on wholesome water; Mr. A. Balfour on the best means of improving the condition of seamen; Mr. Alford, F.R.C.S., on the necessity of legislation for the control and cure of habitual drunkards—the mode of cure recommended being absolute control and enforced abstinence; Mr. J. Banks presented a paper on the purification and utilisation of sewage; Mr. Wanklyn, on the effects of filtration on solutions, which he illustrated by experiments; Mr. W. J. Cooper, on alcohol as food; and Dr. Gee, on the protective power of vaccination.

WESTGATE-ON-SEA.

THIS pleasant and well-situated little watering-place seems to be thriving, to judge by the number of new houses that are now in process of erection. The completion of a large square and some terraces gives it a more coherent appearance than it had at the time of our last visit, when it consisted of only a few widely-dispersed villas and picturesque bungalows. Now, however, that it is emerging from its infancy, sanitary conditions require imperatively to be looked after, and the elementary stage of cesspoolhood abandoned for a complete system of drainage. The authorities have already taken an important step in this direction by securing a good water-supply, and many of the houses have availed themselves of it. Unfortunately, however, its adoption is not universal, and many houses are still supplied by wells. Pollution of the well-water from the cesspools is particularly liable to occur at Westgate, owing to the fissured nature of the chalk in this part of the Isle of Thanet, and the authorities should insist upon the speedy closure of all wells in the neighbourhood of these dangerous receptacles, or else a mishap will occur, sooner or later, which would check the rising fortunes of the place. Westgate appears to be held in more favour by people seeking a summer residence for their families than by casual visitors. If the railway company would only give increased facilities for the journey to and from London we believe that an increased number of professional and business men would be glad, by taking furnished houses for prolonged periods, to avail themselves of the opportunities Westgate affords for quiet, bracing air, and pleasant walks. As it is, Westgate, as well as the other Isle of Thanet watering-places, are practically isolated from London during nine months of the year by a wearisome journey of three hours.

THE FATAL SEWER ACCIDENT.

AFTER no less than ten sittings, the inquest was concluded on the body of a sewer flusher in the employ of the Metropolitan Board of Works, who was suffocated in the New-road sewer on the 9th of August, near the chemical works of Messrs. Wallace, manufacturers of sulphate of ammonia. In spite of a vast amount of conflicting evidence, it was proved to the satisfaction of the jury that lime, together with water refuse at a temperature of 180° Fahr., was passed continually into the sewer from the works of Messrs. Wallace; that in some mode, and by some one, acid was passed into the drain when the deceased was at work, so that carbonic acid was generated in quantity sufficient to cause death. A verdict to this effect was returned, and the Wandsworth Board of Works were censured for great neglect in permitting chemicals to be discharged into the sewer.

We cannot but endorse emphatically the finding of the jury in this sad case; for it is plain that no amount of ventilation of sewers can keep them clear of carbonic acid gas, and it is manifestly the duty of the local authorities to cause the sewers in the neighbourhood of all chemical manufactories in their districts to be closely and constantly examined. Apart from the strong suspicion on *prima facie* grounds that the mischief arose from the discharge from the premises of Messrs. Wallace, the condition of the sewer showed that it had been much neglected by the local authorities, and ought to have been cleared some time before the fatal occurrence.

THE CHAIR OF PRACTICE OF PHYSIC IN THE UNIVERSITY OF EDINBURGH.

AT a meeting of the Curators of the University, held on the 16th inst., it was resolved to elect a successor to Professor Laycock on the 30th inst. The profession will await the result with much interest. The curators are Sir William Sterling Maxwell, Lord Rutherford Clark, Lord Gifford, the Lord Provost, Mr. William Chambers, Baillie Tause, and Sir John M'Neill.

ARTICULAR TUBERCLES.

M. LAVERAN lately brought before the Société Médicale des Hôpitaux some remarkable specimens from a case of acute tuberculosis. The granulations were generally diffused throughout the body, being found in the lungs, pleuræ, peritoneum, intestine, spleen, liver, kidneys, and also in certain synovial membranes, especially in the right knee-joint. The membrane was injected, and upon the red surface there projected many whitish granulations the size of pins' heads. They existed also, although less conspicuous, in the other knee-joint. The other articulations were not opened. The articular disease had occasioned an error of

diagnosis, the malady being regarded as acute rheumatism, the knees having been painful, tender, and distended with fluid. Articular tubercles have been described by Cornil and by Roux.

A DECISION at the Lynn Petty Sessions held recently is not very encouraging to sanitary authorities endeavouring to put down nuisances injurious to health. The West Norfolk Farmers' Manure Company were summoned by the Corporation for carrying on works for the manufacture of manure which, it was alleged, was a nuisance, and calculated to injure the public health. Evidence was given of the offensive nature and deleterious effects of the gases given off on the human body, the respiratory organs being especially affected, by the medical officer of health, Mr. Walford, and by several residents in the vicinity, and also of its destructive action on fruit-trees. Altogether, it appears to us that the complainants made out a strong case against the company. When gases given off by manufactories are powerful enough to destroy trees and shrubs, the presumption is very strong that the same gases are more or less poisonous when breathed by human beings. The magistrates at the Sessions, however, were of opinion that although the manufactory was a nuisance, yet it was not injurious to health. They therefore dismissed the summons, but, at the same time, strongly recommended the Company to abate the nuisance. We are not surprised to learn that the case created very great interest in the locality.

AT a recent weekly meeting of the Salford Board of Guardians was to be considered the plan to be adopted for borrowing and repaying £16,000 for the purchase of land on which it is proposed to erect a hospital for infectious diseases. There was an unusually large attendance of *ex-officio* guardians, who raised a vigorous opposition to the proposal, and not only moved but carried a resolution that all action with regard to erecting a hospital on the site in question should be deferred for six months. The ground of the opposition was the desirability of co-operation between the Board of Guardians and the Corporation of Salford for the erection of a joint hospital for this purpose. A considerable amount of rancour and personality was imported into the discussion, and reference was made to the "criminal inaction of the Corporation," who had been appealed to fifteen months ago to assist in providing this necessary hospital accommodation. Although the responsibility of the Corporation as the urban sanitary authority is indisputable, it is impossible not to regret the action of the *ex-officio* guardians, who at the last moment have stepped in to stop the erection of the hospital which is so sorely needed in Salford during the present epidemic of small-pox.

THE St. Asaph Union Rural Sanitary Authority are about to memorialise the Local Government Board on the necessity of adopting some means of registering zymotic diseases, in order that medical officers of health may obtain the earliest possible information of any outbreak, so as to enable them to take prompt measures for repressing and localising the disease. A copy of the memorial has been forwarded to the neighbouring sanitary authorities, who are invited to co-operate in the action about to be taken. Full consideration of the very important issues which this pressing question opens up cannot be postponed much longer by the Central Board. We trust it may be found possible to formulate a scheme of registering infectious diseases, a reform which would have an incalculable bearing for good on the public health, without at the same time rendering the system inquisitorial in the eyes of the patients' friends or irksome to the practitioner.

THE sanitary condition of Poplar is of a nature to cause considerable anxiety to the sanitary authorities of the district. At a late meeting of the Vestry it was stated that twenty-nine cases of fever and two of small-pox had officially come under notice, of which total number—we have no means of distinguishing or apportioning the mortality—the incredibly large number of twenty-three terminated fatally. If the newspaper report now before us is an accurate statement of facts, an extremely grave state of things exists in the parish. In one block of cottages the water was found defective, closet accommodation deficient, and "altogether the tenements were unfit for human habitation," and, in the opinion of the medical officer of health, it would be impossible to so alter the houses as to make them fit for human habitation. The obvious course we would suggest to the authority here, is to put the Artisans' Dwellings Act in force and demolish the whole block.

IN his last periodical report, the medical officer of health for the City, Dr. Sedgwick Saunders, stated that another case of small-pox of a severe type had occurred at a large Manchester warehouse in St. Paul's-churchyard. The patient had been removed to a hospital, and the premises had been disinfected. In view of the threatening aspect of the disease, Dr. Saunders recommended that the guardians of the City of London Union should instruct their medical officers to be diligent in performing vaccination in all necessary cases, and also to inform him of any sanitary defects in dwelling-houses of the poor which came under their observation. It is greatly to be desired that district medical officers generally should cordially co-operate with medical officers of health. By such means, a large amount of disease may be arrested in an early stage of development.

THE toil and vexation of Poor-law medical service in this country are great, and it is not often that the work performed receives its due appreciation at the hands of Boards of Guardians. We are glad to observe occasions where the latter recognise and acknowledge the nature and quality of the duties rendered to the poor by their medical officers. At a late meeting of the Aberystwith Board of Guardians the thanks of the Board were tendered in complimentary and sympathetic terms to Mr. J. Roberts on his completing a period of thirty-four years' service as medical officer to the Union, for the able and efficient manner in which he had discharged the duties of his office "at a salary which was merely nominal." That the salary should have been merely nominal is not creditable to the department he served so long and faithfully.

THE rate of mortality in London last week was 19 per 1000 annually. There were 1257 deaths registered, including 16 from small-pox, 7 from measles, 57 from scarlet fever, 8 from diphtheria, 14 from whooping-cough, 38 from different forms of fever, and 34 from diarrhœa. Of the 16 deaths from small-pox 5 only occurred in the small-pox hospitals. In the outer ring the mortality from all causes was as low as 13·8.

THE sanitary authority of the Port of London has issued a special notice to ship-owners, dock-superintendents, and others, calling attention to the increase of small-pox in London and elsewhere, and requesting that immediate notice may be given as to the existence, or suspected existence, of the disease on board any vessel lying in the river or the docks.

SMALL-POX appears to be increasing in Salford at an alarming rate. Last week thirty-nine fresh cases and eight deaths from the disease were reported in the town.

OWING to what a Glasgow paper calls its disgraceful sanitary condition, a severe epidemic of enteric fever prevails in Blantyre. Other diseases of a zymotic character are also rife in the place. In August, twenty cases of typhoid were reported, and in the subsequent month many more inhabitants were attacked, while at the same time patients with diphtheria, scarlet fever, and typhus came under medical treatment. In one family of ten there are now eight members stricken with disease, while in another house there are five ill. The circumstances of the outbreak, and the extraordinary apathy and negligence generally shown in the matter, are of such a nature as to call for an early investigation by a Government medical inspector.

A MEMBER of the profession, Mr. John Angus, M.R.C.S., L.S.A., met with a fatal street accident last week. The deceased, while crossing Long-acre in the evening, was knocked down by a four-wheeled cab, the shaft of which inflicted such injuries upon him that he shortly after died. At the subsequent inquest the jury returned a verdict of "Accidental death," declining to attach any blame to the driver. Mr. Angus was in his sixty-fifth year.

SCURVY appears again to be on the increase. The *Pall Mall Gazette* reported last week that a large British ship had lately arrived at New York with some severe cases on board, and on Sunday a vessel named the *Cedric* arrived at Falmouth with two or three of the crew affected. This last case will be officially investigated by the Board of Trade, and a preliminary inquiry has already been held at the Falmouth shipping office.

WE lately announced a recrudescence of ophthalmia in the schools of the Holborn Union. Up to the present date 167 cases of the disease have been reported, of which number 115 are of a slight nature. It is intended to send some of the children to Herne Bay as soon as the building known as the Pier Hotel in that place shall have been got ready for their reception.

ASSISTANCE TO THE WOUNDED IN TIME OF WAR.

(From a Correspondent.)

A LECTURE, delivered on 29th May, 1876, by Surgeon Sandford Moore, M.B., F.S.S., at the Royal United Service Institution, deserves, it appears to me, a fuller notice than you have already given to it.

Important as the subject appeared five months ago, how doubly urgent must all such considerations now become when the possibility of war has so closely verged upon the reality; I therefore offer no apology for repeating the views of the lecturer.

The substance of the discourse may be epitomised under three heads: the carriage of the wounded from the field of battle; the care of the wounded in the field and other hospitals; and the transport of the wounded to their distant homes. Under the first two heads the whole difficulty resolves itself into one word, "Men"—men to act as carriers and drivers, and men to take the part of nurses; while for the requirements of distant transport the mechanical adaptation of vessels and railways is the main object. For this latter purpose suitable measures once devised can be kept over till the necessity arises, but for the former the motor power has to be found, trained, retained, and, if expended, replaced. The British army is divided into eight army corps, and 2000 men are necessary for the medical duties of each. Of these a proportion will act as stretcher-bearers only, and the remainder as hospital nurses; for the technical training of the former one month is required, for that of the latter a year. That the total number of stretcher-bearers should be drawn from the fighting strength of the army Surgeon Moore very justly pronounces to be impracticable, and offers the admirable suggestion that each of the 1747 companies of infantry volunteers should be invited to furnish two men ready to undergo the requisite training of one month, and willing to take the field in time of war. This in three months would provide 10,000 bearers, or more than enough for the eight army corps, even if mobilised at once. For the provision of hospital nurses no such short cut is attainable, since the proper education of each would require one year. Nevertheless, by the above proposal the question is half solved, and further experience may point a way to maintain in peace a sufficient number of hospital nurses for the requirements of war.

There is throughout this lecture of Surgeon Moore's a feeling which struggles to find utterance in various ways, but which deference to the long-established tenets of the past, and delicacy towards the mixed audience present, all but stifle. It is the sense of the utter anomaly that medical officers should be invited to propose to the nation a method of organising the *personnel* requisite for the care and treatment of its wounded soldiers, and should be entrusted with the special instruction of this portion of the army, and yet when these very men proceed to put in practice, under the guidance of medical officers, the lessons they have received, they should not be under the command of those with whom they are to act during their entire service. Surgeon Moore, evidently hesitating to express his own strong convictions on this subject, implies by quotations what he feels. Speaking of the training of the Prussian surgeon, he says, "which fits him to exercise powers of command over hospital subordinates, and in which he *differs so materially* from the surgeons of our own service." Again, quoting from an American Official Circular, November, 1865:—"Never before in the history of the world was so great a system of hospitals brought into existence in so short a time. They differed from the hospitals of other nations in being *under the command of medical officers*. Never before in the history of the world has the mortality in military hospitals been so small." Here, then, is evidence that when the experiment was made on the largest scale, the wounded certainly were not the losers; and as their interests are paramount, it seems impossible that such results should go unheeded.

That the subordinate hospital staff should be selected, specially drilled, educated, and qualified by medical officers, and yet immediately upon entering on the performance of their duties, be taught to look upon men promoted to commissions from their own ranks as their commanding officers by whom they are to be indulged or punished, degraded or promoted, while the medical officers to whom they are responsible for their duties stand helplessly by, is so utterly at variance with common sense, and so entirely subversive of good discipline, that Surgeon Moore must see therein, although he has forborne to dwell upon it, a germ of disunion which will grow into such divergence between the three factors, the medical officers, the officers of orderlies, and the Army Hospital Corps, that no organisation of hospital staff that can be devised will long withstand its influence.

Whether, then, it be old-fashioned prejudice or military apprehension of encroachment which causes the amalgation of incompatibles to be attempted, the time has doubtless come for a free investigation of the subject; and now that the idea of working other departments by the restoration of warrant officers under the direct command of departmental officers is about to be tried, it is not difficult to perceive the direction in following which a complete and economical solution of the hospital staff question could be easily reached.

MANCHESTER.

(From our own Correspondent.)

THE Winter Session of the Faculty of Medicine, Owens College, was opened by Professor Morgan. In an able and lengthy address, he showed how closely the advancement of medicine and surgery as sciences had in time past depended on exact experiment, specially mentioning the invaluable labours of Harvey and Sir Charles Bell, who had laid the foundation of a true system of vascular and nervous physiology, and had thus shed so much glory upon

their country. He then reviewed the recent legislation on the subject of vivisection in strong terms of disapproval, and enumerated many instances in recent years of surgical operations attended with the happiest results, which could not have been performed except after prior experimentation upon animals, making special reference to extirpation of the larynx and kidney. In concluding his address, Dr. Morgan referred to the question of a university charter for Owens College, which he believed must sooner or later be granted. He gave special reasons for this in the persistent manner in which the older universities had neglected the medical profession, and, moreover, in their little adaptation, from size and position, for the successful cultivation of clinical medicine and surgery; in the fact that the University of London is not a teaching body; and also in the important position of Manchester as the nucleus of an immense population of four or five millions.

From the report of the Dean (Prof. Gamgee), it appears that the school is in a highly satisfactory condition, the number of students in the session 1875-76 being 166. Some changes have taken place in the Senate and staff of lecturers. The vacancy in the Senate caused by the death of Professor Southam has been filled by the election of Dr. Thorburn. Professor Lund continues to lecture on Systematic Surgery, whilst Mr. Bradley has been elected lecturer on Practical Surgery. The lectureship on Forensic Medicine, rendered vacant by the resignation of Mr. Morley Harrison, has been united to that of Public Health, and Dr. Arthur Ransome takes the two subjects. Mr. J. Beswick Perrin has resigned the demonstratorship of Anatomy, whilst retaining the office of medical tutor. Mr. Alfred Young, M.B.Edin., has been appointed Demonstrator and assistant-lecturer in Anatomy, and Mr. John Priestley demonstrator and assistant-lecturer in Physiology and Histology.

The Museum of Anatomy and Pathology has been completed during the past year. It will include the collections of the late Mr. Turner and Professor Southam.

The subject of the removal of the Infirmary still excites a great deal of interest and discussion in Manchester. It was finally decided last week that it should be removed, the decision being precipitated by the very defective state of the drainage and other works. The future site is not fixed, but the preponderance of opinion appears to be in favour of the neighbourhood of Owens College.

The three new pavilions of the Children's Hospital at Pendlebury are now being rapidly proceeded with, and will, it is believed, be completed next June, when it will afford accommodation for 168 beds, and will be (perhaps with one exception) the largest hospital exclusively for children in this country. The building occupies a healthy and elevated site about four miles north-west of Manchester, where it has central offices and an out-patient department with which it is connected by telegraph. It consists of an administrative block (containing committee and other private rooms), from which extends, due east, a central corridor over one hundred yards in length. Branch corridors lead to the six pavilion wards, three on each side. The three wards to the north of the long corridor have been opened some years; of these one is a fever ward, another a surgical, and the third a general medical ward. No expense has been spared to render the sanitary and other arrangements as perfect as modern science can achieve, and the building is a model of its kind, and is a great boon to the low-lying and unhealthy districts of Manchester and Salford, as well as to other large towns in the neighbourhood. At first it was feared by some that the distance from Manchester might interfere with its usefulness, but this has not been found to be the case in even a perceptible degree, and numerous, unfortunately, have been the urgent cases to which the medical officers have been obliged to refuse admission during the past year, owing to want of space.

Manchester, Oct. 11th, 1876.

NEW STUDENTS.

THE following return is supplemental to the list of new entries at the London medical schools we have already published:—At St. Thomas's Hospital 43 students have entered; at Charing-cross Hospital, 40; at St. George's Hospital, 33.

THE ROYAL COLLEGE OF SURGEONS.

A QUARTERLY MEETING of the Council was held on Thursday. The reports of the several committees were received and agreed to. In the course of the report of the Museum Committee, an allusion was made to the present, by Dr. T. B. Peacock, of nearly 200 specimens, illustrating principally malformations of the heart and its vessels, with a descriptive reference to each, upon which the Council passed an unanimous vote of thanks to the donor. The name of a member of the College who had been convicted of a grave offence, and condemned to hard labour, was then removed from the College list. A respectful letter from Miss Jex Blake was next read and discussed, in which she requested to be informed whether the Council was prepared either to admit her to examination for the licence in midwifery, according to a promise made in March, or to allow her to take advantage of the provisions of Mr. Russell Gurney's Act, to admit her to examination for the membership of the College. As there is at present no examining board in midwifery, an examination by that body could not be undertaken, whilst the question of admission of ladies to the M.R.C.S. diploma is under the consideration of the Council. The midwifery question will be further discussed at the next meeting of Council. The Conjoint Scheme will also be taken into consideration at that meeting.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates of the College on Oct. 16th:—

Collins, Floyd, Ware.
Downes, Edmund, St. Mary's Hospital.
Dunbar, James John Macwhirter, Ladbroke-grove.
Fry, John Blount, Swindon.
Greenish, Robert, New-street.
Khory, Rustomjee Naserwanjee, Elsham-road.
Merriman, John Wm. Conyers, Kensington-square.
Page, William Henry, Flaxman-road.
Street, Alfred Wm. Frederick, Royal Free Hospital.
Thompson, Arthur Hirst, Gomersal, Leeds.
Tomlinson, Edward Denham, Preston.
Traill, Mark Windeyer, University Hospital.
Woollett, Charles Jerome, Monmouth.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Oct. 12th:—

Cree, Percy Kimburn, St. John's-park, Holloway.
Gamble, H. Warburton Banton, Brunswick Villas.
Skerman, Sidney, Waltham Abbey, Essex.
Taylor, Henry Edward, Manor-road, Bradford.
Whitsed, John, Sutton St. Edmund, near Wisbeach.

[The name of John Lloyd Thomas was omitted in the pass-list (second class) of the Arts examination held at the Hall on the 29th and 30th September last.]

QUEEN'S UNIVERSITY IN IRELAND.—The following degrees were conferred on the 13th inst.:—

DOCTOR IN MEDICINE.—First Honour Class: Wm. M'Geagh, John Jagoe Whelpy. Second Honour Class: Jeremiah Mullane, Arthur A. Woods. Upper Pass Division: Robert John Camac, George Louis Latour. Unclassed: Alfred Allen, Thomas Archer, Samuel Bateman, Thos. Beattie, Charles H. Bennett, David Bradley, Robert A. Brannigan, James F. Brodie, Richard J. Burke, William Coates, Fredk. H. Collins, Michael Collins, Jephson J. Connell, Patrick J. Dempsey, Arthur Derham, Dunbar Dickson, John S. Dillon, Justin F. Donovan, Michael Dundon, Robert Eccles, F. Meagher Geoghegan, Charles Good, Thomas Greer, Henry Hunter, John B. Isaac, Jas. M. Kennedy, Gilbert Kirker, George Laffan, Wm. M'Afee, Michael J. M'Carthy, Mark A. M'Donnell, Robert M'Ivor, R. D. M'Master, Robert B. M'Vittie, James Magill, Edward G. Marks, Henry Molony, John Muirenan, Francis H. Murphy, Channing Neill, Maurice J. O'Sullivan, James Pedlow, Thomas F. Riordan, Chas. D. Tanner, John F. Wales, Archibald Wallace, William Williamson.

HONORARY DEGREE DOCTOR IN MEDICINE.—Richard Eustace, R.N.

MASTER IN SURGERY.—Alfred Allen, Thomas Archer, Samuel Bateman, Robert Beattie, C. H. Bennett, Robert A Brannigan, James F. Brodie, Richard J. Burke, Robert J. Camac, William Coates, Fredk. H. Collins, Michael Collins, Jephson J. Connell, Patrick J. Dempsey, J. Dunbar Dickson, John T. Dillon, Justin F. Donovan, Michael Dundon, Robert Eccles, Turner J. Fisher, Samuel Fergus, F. Meagher Geoghegan, Chas. Good, Thomas Greer, Thomas Kyle, George Laffan, George L. Latour, William M'Afee, Michael J. M'Carthy, Mark A. M'Donnell, William M'Geagh, Robert M'Ivor, Edward Marks, Francis H. Murphy, Henry Molony, Jeremiah Mullane, Channing Neill, James Pedlow, David Robertson, Thos. F. Riordan, James Rose, Maurice J. Sullivan, Charles D. Tanner, John Wales, John Jagoe Whelpy, William Williamson Arthur A. Woods.

A MAN named Clampett died in Tralee last week from an overdose of chloral hydrate.

Mrs. Crace Calvert has given £700 for the foundation of a Scholarship of £25 per annum, in chemistry, at Owens College, Manchester, in memory of her late husband, Dr. Crace Calvert, F.R.S.

Dr. C. E. Woodbury, assistant-physician at the McLean Asylum for the Insane, Somerville, U.S.A., while in the discharge of his duties at the hospital on August 25th, was attacked by an inmate with a croquet mallet. It appears that Dr. Woodbury was first knocked down, and when on the ground was beaten about the head, resulting in fracture of the skull. But little hope is entertained of his recovery.

ON the 13th inst., at the Clerkenwell Police-court, under the Medical Act, a charge was preferred by the secretary of the East London Medical Defence Association against a "Dr. Kahn," 16, Sidmouth-street, Gray's-inn-road, of falsely pretending to be and taking the title of a "Doctor of Medicine." Mr. Pridham, for the Association, mentioned that the defendant had distributed the usual objectionable quack circulars. Mr. Ricketts contended that defendant had not been guilty of wilful falsity, inasmuch as he held a diploma granted to him after examination by an American medical college, and had not pretended to be a registered practitioner. Mr. Cooke thought the charge proved, and inflicted a penalty of £5 and costs.

AT last week's meeting of the Sheffield Town Council, a committee was appointed to consider the desirability of reopening negotiations for the purchase of the plant and goodwill of the local water company. The present is considered a more favourable opportunity for the purchase than prevailed when previous attempts to negotiate the purchase ended in failure. The company is in a position to give the town an abundant supply of good water at a reasonable price, and if the supply were in the hands of the Corporation, much saving might be effected in the cost of management, and the sale would relieve the company from its present obligation to expend a further considerable amount of unremunerative capital.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—At the annual meeting of this College, held on the 18th inst., the following office-bearers were elected for the ensuing year:—President: Dr. Henry Duncan Littlejohn. Presidents of Council: Dr. Andrew Wood, Mr. William Walker, Mr. Joseph Lister, Dr. P. H. Watson, Dr. John Smith, and Dr. J. D. Gillespie. Examiners: Dr. Archibald Inglis, Dr. Peter David Handyside, Dr. James Dr. Gillespie, Dr. Henry D. Littlejohn, Dr. Patrick H. Watson, Dr. David Wilson, Dr. John Smith, Dr. Argyll Robertson, Mr. Joseph Bell, Mr. Thomas Annandale, Dr. John Duncan, Dr. Robert J. Blair Cunynghame. Secretary and Treasurer: Mr. Joseph Bell. At the same meeting Dr. Andrew Wood was unanimously elected representative of the College in the General Council of Medical Education and Registration of the United Kingdom for the period of three years from the 9th inst. Both the College and the Council may be congratulated on Dr. Wood's re-appointment. The College could not have a better representative, and Dr. Wood's acquaintance with the work of the Council from the very beginning and his active part in it, make his presence very valuable.

Medical Appointments.

ARCHER, R. K., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Upper Holloway Branch of the Holloway and North Islington Dispensary, vice Greaves, resigned.

BERVON, J., M.D., F.R.C.P.E., has been reappointed Medical Officer of Health for the Mansfield Urban Sanitary District for three years from Dec. 25th next.

BLAIR, A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Ferryport-on-Craig, Fifeshire, vice Laing, deceased.

BRODRIBB, C. A., M.R.C.S.E., M. & L.S.A.L., has been appointed a Surgeon to the Hastings Dispensary, vice Grooms, deceased.

BURROUGHS, B. P. B., M.R.C.S.E., L.S.A.L., has been appointed Junior Medical Officer to the West of England Sanatorium, Weston-super-Mare, vice Jones, deceased.

DIAMOND, J., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Muthill, Perthshire, vice Core, appointed Medical Superintendent of the Barony Parish Hospital, Glasgow.

DUNN, C. B. N., M.R.C.S.E., has been reappointed Medical Officer for the Chrich District of the Belper Union.

ESLER, R., M.D., has been appointed Honorary Medical Officer to the Ulster Hospital for Children, Belfast.

GARLICK, G., M.B., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Registrar to the Hospital for Sick Children, Great Ormond-street, vice Burness, resigned.

HAMILTON, A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Chester Goldsmiths' Company, vice Watson, deceased.

KING, F., M.R.C.S.E., L.S.A.L., has been appointed a Surgeon to the Royal Cornwall Infirmary, Truro, vice Andrew, deceased.

MCCOMB, W. T., L.A.H.D., has been appointed Apothecary to the City of Dublin Hospital, vice Fisher, resigned.

MILLIGAN, W., L.R.C.P.Ed., M.R.C.S.E., has been reappointed Medical Officer for the Brassington District of the Ashbourn Union, Derbyshire, for one year.

OWENS, G. B., M.D., has been appointed a Governor of the Richmond District Lunatic Asylum, Dublin.

POIGNAND, M., M.B., M.R.C.S.E., has been appointed a Medical Officer to the Highbury-vale Branch of the Holloway and North Islington Dispensary.

PRONGER, C. E., L.R.C.P.L., M.R.C.S.E., has been reappointed House Surgeon to the North Devon Infirmary, Barnstaple, vice Reynolds, resigned.

REID, W. L., M.D., has been appointed Out-door Accoucheur for the Western District of the Glasgow Lying-in Hospital, vice Millar, resigned.

RENTON, J. C., M.B., F.F.P.S.G., has been appointed Extra Dispensary Surgeon to the Western Infirmary, Glasgow.

SNELL, S., L.R.C.P.L. & M.R.C.S.E., has been appointed Lecturer on Diseases of the Eye at the Sheffield School of Medicine.

SWANZY, H. R., M.B., F.R.C.S.I., has been appointed Ophthalmic Surgeon to Dr. Steevens' Hospital, Dublin.

TANNER, J., M.D., M.R.C.P., F.L.S., has been appointed an Assistant-Physician to the Metropolitan Free Hospital.

VIVIAN, R. T., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Crowan District of the Helston Union, vice J. Vivian, L.S.A.L., deceased.

WALFORD, W. G., L.R.C.P.L., M.R.C.S.E., has been reappointed Medical Officer of Health for the King's Lynn Port Sanitary District.

Births, Marriages, and Deaths.

BIRTHS.

BAKER.—On the 12th inst., at Cheltenham, the wife of T. Y. Baker, M.R.C.S.E., Surgeon-Major, Army, of a son.

BATTERBURY.—On the 11th inst., at Park-road, Haverstock-hill, the wife of Richard Legg Batterbury, M.B., of a son.

BURMAN.—On the 16th inst., at Devizes, the wife of J. Wilkie Burman, M.D., Medical Superintendent of the Wilts County Lunatic Asylum, of a daughter.

DAVIES.—On the 11th inst., at Pendleton, Manchester, the wife of Francis T. Davies, L.R.C.P.Ed., of a son.

HOUSTON.—On the 12th inst., at Kirkcaldy, the wife of Patrick C. Houston, M.D., of a daughter.

INGLIS.—On the 15th inst., at Allandale, Upper Norwood, the wife of Walter William Inglis, M.D., of a daughter.

O'REILLY.—On the 6th inst., at Trim, co. Meath, the wife of Francis J. O'Reilly, L.R.C.P.Ed., of a son.

MARRIAGES.

FRANKLIN—DENNE.—On the 17th inst., at St. Saviour's, Eastbourne, by the Rev. H. R. Whelpton, M.A., Incumbent, George Cooper Franklin, F.R.C.S., of Leicester, elder son of George B. Franklin, of Stonegyate School, Leicester, to Lucy Hannah, younger daughter of William Denne, F.R.C.S., of Eastbourne. No cards.

RENTON—MILL.—At Forres-street, Edinburgh, by the Rev. Alex. O. Laud, assisted by the Rev. J. D. M'Culloch, Latheron J. Crawford Renton, M.B., F.F.P.S.G., of St. James's-terrace, Hillhead, Glasgow, to Margaret Annie, fourth daughter of the late Dr. James Mill, of Thurso.

TAYLOR—SAMGSTER.—On the 14th inst., at Christ Church, Ealing, by the Rev. Charles Taylor, M.A. (brother of the bridegroom), assisted by the Rev. J. Hilliard, M.A., Vicar, William Bramley Taylor, M.R.C.S., of Champion-park, Denmark-hill, Camberwell, to Emily Susan, second surviving daughter of the late Martin Samgster, Solicitor, of Stockwell and St. Swithin's-lane, and niece of Charles Collambell, Esq., of Lambeth-terrace.

DEATHS.

ALLAN.—On the 9th inst., at Killaha Castle, Killarney, James A. Allan, M.D., Surgeon H.M.S. *Revenge*.

ANGUS.—At Great Coram-street, John Angus, M.R.C.S.E., aged 65.

BERNAL.—On the 5th inst., at Limerick, Robert Arthur Bernal, Surgeon R.N., aged 36.

CRAWFORD.—On the 10th inst., at Eythorne, Kent, James Robert Crawford, L.F.P.S.G., aged 42.

EDENBOROUGH.—On the 14th inst., at Manor-road, Holloway, Alfred Edenborough, M.R.C.S.E., aged 69.

HEWITT.—On the 9th inst., at North Walsham, William Hewitt, L.S.A.L., aged 70.

HILLIARD.—On the 2nd inst., at Lansdowne-road, Kensington, Dr. John Hilliard, aged 66.

ORR.—On the 7th inst., at Portsmouth-road, Surbiton, William Orr, Surgeon, aged 41.

PILKINGTON.—On the 9th inst., at Accrington, William Binns Pilkington, L.R.C.P.L., aged 25.

WADE.—On the 11th inst., at Wath-upon-Dearne, Jonathan Gawtress Wade, M.R.C.S.E., aged 65.

WRIGHT.—On the 13th inst., at Edinburgh, Thomas Strethill Wright, M.D.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

ARE ECZEMA AND PSORIASIS LOCAL DISEASES, OR ARE THEY MANIFESTATIONS OF CONSTITUTIONAL DISORDERS?

A PAPER under this heading was read by Dr. L. D. Buckley in the section of Dermatology and Syphilology at the Philadelphia International Congress. Afterwards the following propositions were adopted by the section:—1. Eczema and psoriasis are diseases *sui generis*, and are not to be confounded in any way with other states, as the former with artificial dermatitis, and the latter with the eruptions of syphilis, scaly eczema, or leprosy. 2. Eczema and psoriasis cannot own a double independent causation or nature, at one time local, and another constitutional; but with other diseases they may have a twofold cause—namely, a predisposing and an exciting. 3. Eczema and psoriasis in many of their features resemble the accepted constitutional disease more than those recognised as local. 4. Local causes play an important part in the etiology of eczema; they are probably inoperative in psoriasis. 5. Certain relationships between psoriasis and epithelioma have been claimed, which require much further investigation. At present they are not established, and are no proof of the local nature of psoriasis. 6. No direct causal connexion has yet been demonstrated between the scrofulous state and eczema and psoriasis. 7. Local treatment is often insufficient alone to remove the lesions of eczema and psoriasis, and cannot prevent or delay relapses. 8. The success of local treatment in eczema and psoriasis does not demonstrate the local nature of these affections. 9. Constitutional treatment alone and singly can cure many cases of eczema and psoriasis, and prevent or delay relapses in a certain proportion of cases; under constitutional treatment it is intended to signify every agency not properly placed among local measures. 10. The total weight of argument is that eczema and psoriasis are both manifestations of constitutional disorders, and not local diseases of the skin.

Mr. S. Benton.—The Notes shall appear as soon as possible.

MEDICAL EDUCATION AT CAMBRIDGE.

To the Editor of THE LANCET.

SIR,—That it is necessarily more expensive to obtain two degrees than one is a proposition the truth of which is obvious to the mind of everyone who is acquainted with University affairs either in Cambridge or elsewhere. Taking the question under discussion, every non-collegiate student, like every other member of the University, has the option either of working for the B.A. degree or for the M.B. degree, or for both together. Now, Sir, Mr. Crofts states he has often heard men complain that £150 is not sufficient to meet all the payments requisite to obtain the B.A., and then proceeds to show that it is not sufficient to obtain *both* the B.A. and M.B. degrees; for no one will assert that the sum of £40 required for purely medical instruction is in any way demanded from the medical student who aims simply at graduating in Arts.

On the other hand, the man who intends to confine his attention to medicine is entirely exempted from all "general" and "professorial" fees, as well as from that for the B.A., and consequently from this cause alone the expenses of the genuine medical student are, according to Mr. Crofts' own showing, at least £11 8*s.* below the minimum as given by him under the head of fees to "Board and University"—a very considerable sum when the whole amount under consideration is £150.

The real point appears to me to be this, that the medical student may, if he pleases, graduate in Arts *or* in Medicine; whereas Mr. Crofts seems to argue as though it were compulsory to graduate in both—a clear misconception of the University regulations, which necessarily entails a greater expenditure on the part of the student than that of taking a single degree in either faculty. A man will probably reap all the advantages connected with a Cambridge degree whether he become a Bachelor of Medicine or of Arts, and hence, if he elects to graduate in both, he at once rushes into expenses not contemplated when proceedings in a single subject are referred to, and by so doing immediately removes himself from the class of those whose object it is to obtain the "Cambridge degree" at the smallest cost.

Whilst on the subject of medical education at this University, let me advert to another point in the closest connexion with it, which I think deserves to be extensively known—viz., the numerous aids which are now given by most of the Colleges to deserving students of Natural Science. Taking my own College as an example, since this is the only one of which I can speak with any certainty, three Scholarships are annually offered to students before commencing residence, each of the value of £80 a year, any one of which may be given for a competent knowledge in Natural Science. Further, there are a number of Foundation Scholarships, ranging in value from £50 to £80 per annum, or even more (in addition to annual prizes of books), any one of which may in like manner be held by a student in Natural Science. Assuming, therefore, that a man holds a Scholarship of the annual value of £50, the smallest now given, and taking it that the minimum expenditure in College is £120 a year, and that £150 is all that is required to graduate as a non-collegiate student, it follows that an extra outlay of £90 will enable such a man during his whole term of residence to be a member of a College, and to obtain the benefit of tuition in any subject he may require. As a set-off against this additional £90, there is the fact that at many Colleges the tenure of the Scholarship does not cease with graduation, but in suitable cases is prolonged for three years after B.A., and hence for a man who is likely to take a good place in the Natural Sciences Tripos, it is at least as cheap to put his name on the boards of some College as to spend his three years as a non-collegiate student.

I am, Sir, yours obediently,

Downing College, Oct. 16th, 1876. J. C. SAUNDERS, M.A., Lecturer on Natural Science.

"PASSION, JEALOUSY, AND GIN."

AT the meeting of Surrey magistrates held on Tuesday it was shown that a large number of persons had been committed to the county gaol, charged with attempting suicide. The chaplain reported that he had arrived at the conclusion, after investigation of such cases, that in very few instances was self-destruction deliberately intended. He proceeded to say that "the sensational accounts which are occasionally published of attempts of young women to drown themselves, and the gallant rescue by which they had been preserved from a watery grave, are almost always bloated fictions founded upon the barest fact. The scene described is at most a mere culmination of passion, jealousy, and gin." It is a pity that the alliteration could not have been completed here. It would sound so much more imposing.

Query.—The water is totally unfit for drinking purposes, and is undoubtedly contaminated with the drainage of a sewer, cesspool, or stable-yard.

Mr. C. F. Hill.—We never recommend a particular physician or surgeon.

SANITATION AT PENZANCE.

To the Editor of THE LANCET.

SIR,—The letter of "F.R.C.P." illustrates in a forcible manner the great need of one of your Special Commissioners to enlighten even the medical men of the Far West on sanitary matters. "F.R.C.P." prides himself that "we have an urban sanitary authority, a medical officer of health, and an inspector of nuisances," seemingly totally innocent of the fact that by law the whole country is divided into sanitary authorities, and that such officers are appointed for the most ignorant village of the kingdom. Penzance has carried out the letter of the law in the appointment of a medical officer of health; her not doing so would have involved her in expense; but has taken the only means in her power to insure that the office shall be a sham by consenting year after year to the remuneration of that officer by a mere vote of thanks. This should not be made a doctor's question; it is one in which the reputation of Penzance as a health-resort is deeply involved, and if your correspondent continues to screen its shortcomings in the hope that invalids may blindly visit it, and run the risk of zymotic disease, a day of reckoning—injurious to Penzance as it was to Newquay—must come. My former letter showed that I was a sincere well-wisher to the reputation of Penzance, and it is my very sincerity which induces me to expose her faults.

A few figures from the Registrar-General's Returns may illustrate how Penzance has warded off zymotic disease during the past five years:—

Total mortality per 1000, excluding workhouse deaths, not chargeable to	1872.	1873.	1874.	1875.	1876 (6 months).
Penzance sub-district ...	26	20	24	23	23
Zymotic death-rate... ...	70	17	43	17	20

An epidemic of small-pox in 1872, of measles in 1874, and of whooping-cough in 1875.

A wave of scarlet fever is now travelling westward. At Hayle, ten miles east of Penzance, it has been of such a malignant type as to necessitate the closing of the public schools. Penzance will, no doubt, welcome it as in previous epidemics, and its death-rate will again run up to the average of large cities, and beyond that of any town professing to be a health-resort.

Medical science is not powerless in lessening the spread of these diseases. We have a higher mission than to prescribe drugs when the damage is done; but medical men cannot live on thanks any more than any other profession or class. If Alderman Boase wishes to benefit his town and lessen the rates, let him receive a salary, say of £100, which shall enable him to do £100 worth of sanitary work. The public can then understand that preventive medicine is a reality. No ratepayer's money can be expended with a brighter prospect of beneficial return. He may then devote this £100 to charity or to the payment of the rates of the extreme poor, and by this course *earn* the gratitude and *thanks* of all. But the system at present in vogue is disgraceful to everyone concerned if they have any belief in sanitation; it is a stumbling-block to sanitary reform in other towns, who naturally look to the "Queen of the West" for guidance, and unworthy of any town which advertises itself for invalids.

The wisdom and energy of an intelligent medical officer of health, evidenced in his daily work, are of much more importance than sewers; for without proper supervision the latter may at any time be actual spreaders of disease.

Send us an impartial Commissioner to report on the health-resorts of Devon and Cornwall. Nothing less exposing will induce us to improve.

Yours truly,

October, 1876. ESPLANADE.

VIBURNUM PRUNIFOLIUM.

DR. JENKS, of Detroit, has drawn attention to the value of the fluid extract of this plant in the treatment of diseases of women, especially in the various forms of dysmenorrhœa. The dose he advises is from half a drachm to a drachm of the extract, given every two or three hours during the monthly period.

An Observer.—We agree with our correspondent, but cannot afford space for individual cases.

MONSTROSITY.

To the Editor of THE LANCET.

SIR,—On Monday, May 29th, 1876, I was called to attend Mrs. H——, in labour with her fifth child. On examination I found the head presenting; labour proceeded easily and naturally, and terminated in about fifteen minutes after my arrival. To my surprise I found that the child was entirely destitute of the anterior part of the abdominal wall and chest; the bowels, liver, and lungs being completely exposed. The bowels had a great tendency to slip about; the heart also was especially prominent, and continued to beat for about twenty minutes after birth. The child uttered but one feeble cry before its death. The abdominal edges were rounded off, the peritoneum and skin blending into one another, and so the pleura. There was no history of fright or any other cause to account for this state of things. I greatly regret not having been able to secure this specimen; but the permission of friends could not be obtained.

Yours &c.,

Southampton, Oct. 12th, 1876. S. H. HOBLEY, L.R.C.P. Lond., &c.

THE HISTORY OF MEDICINE.

THE revolutions in the theory and practice of the healing art form a most instructive and fascinating section of the history of science. They have not yet found, however, their historian, though it is fair to say that each successive attempt has lightened the task for the next comer. This is eminently true of the recent work of Dr. Hermann Baas: Grundriss der Geschichte der Medicin und des Heilenden Standes (Outlines of the History of Medicine and of the Physician's Status). The author has a high estimate of the importance of his subject, and considers it as eminently worthy of the attention of the practitioner, and also of the student of the culture of humanity. In his first division he treats of the medical theory and practice of those peoples whose development in this direction is closed—the primitive peoples. In his second he handles the medical theory and practice of those peoples whose development in this direction either was or still is progressive. This division contains four periods—1st, that of the Greeks and Romans down to the fall of the Western Empire; 2nd, that of Europe down to the discovery of America; 3rd, that of Europe and the colonies down to the close of the first French revolution; and 4th, that of the present century all the world over. Treated as Dr. Baas treats it, this history amounts to something like a text-book of universal pathology and therapeutics. In the historical survey of the physician's status, he gives a great deal of curious, entertaining, and always valuable information touching the practitioner's relations with his clients, the fees given, the mode of prescribing, and so forth. Portraits of distinguished lights of the profession (mainly German, by the way) add to the interest of the exposition, and a copious "Index Nominum" completes its usefulness. An English translation, so modified as to adjust the balance which inclines towards Germany, particularly in the citation of eminent examples, would find, as it would deserve, many readers.

Frank.—1. There is no such special hospital in London.—2. We cannot recommend anyone.

GERMAN DOCTORS.

To the Editor of THE LANCET.

SIR,—I believe that an idea exists generally in England that German doctors charge very small fees. As this impression may lead persons of small means to go to German baths, and place themselves under local physicians there without due inquiry, I think I may be doing a service in giving my experience.

I have been staying at Schwalbach, near Wiesbaden, for some four or five weeks. On our arrival we consulted one of the two leading German doctors there, and owing to trifling indispositions we had to ask him to call rather more frequently than we otherwise should have done. Altogether he paid ten visits; but as on one occasion he was consulted by a second patient, we may consider it as eleven visits. Almost all were of the most hasty character, scarcely ever lasting beyond five minutes, and I believe that in all cases he was actually visiting in the hotel or passing the door. On leaving he presented a bill for 120 marks (£6). This was probably based on a charge of 20 marks (£1) for the first visit, and 10 marks for each of the other ten. In addition to this expense must be reckoned the cost of the medicines at the apothecary's, which was not inconsiderable. I should scarcely have remarked on this charge had I not made careful inquiries beforehand, so as to know what to offer in case the medical man had left it to me to pay the usual fees. I found that the Germans themselves would not have thought of offering more than 6 marks (6 shillings) a visit, and that the usual fee is even less.

I am not fully acquainted with the rules which govern the fees of English physicians; but it certainly is a new idea to me that they may be regulated by the *nationalities* of their patients on a sliding scale!

I may also mention that visitors staying at Schwalbach are charged a "kur tax" of 21s. for two persons, and 9s. for each additional person in the party, to support the band and other matters, including the *poor of the town!* It may be a useful suggestion to the authorities of some of our watering-places to levy a *poor-rate on the visitors!*

I am, Sir, yours obediently,

Sept. 30th, 1876. A WANDERER.

Clyde should not expect the Registrar-General "to save him the trouble." If he does so he will be grievously disappointed. It is desirable that such prosecutions should be undertaken by Societies rather than by individuals.

Iota.—Such conduct is disgraceful. The circumstances of the case alluded to have been brought under our notice before; but we are powerless to check proceedings of the kind.

Foreign Student should write to the Secretary of the College.

AN AUSCULTATORY SOUND.

To the Editor of THE LANCET.

SIR,—If Dr. Leftwich will refer to the *Irish Hospital Gazette* for July 15th, 1873, he will find that Dr. H. Head, Physician to the Adelaide Hospital, Dublin, has already described an instrument similar to his in a paper on "Auscultation as an Aid to the Diagnosis of Stone in the Bladder," published in that journal. Yours faithfully,

Warwick County Asylum, Oct. 17th, 1876. A. LAW WADE, M.D.

OXYCHLORIDE OF ZINC IN DENTISTRY.

MR. F. M. DIXON, D.D.S., of Pennsylvania, recommends the use of this material in dental practice. He states that in no case, with one accidental exception, has it caused the death of a single tooth, though many of those to which it was applied were extremely sensitive. In not a few cases he has packed the oxychloride right into the cavities without any intervening protection; but he does not recommend this practice in cases of exalted sensibility.

DEATH FOLLOWING THE ADMINISTRATION OF ETHER.

THOSE who remember how confidently Dr. Joy Jeffries spoke of the safety of ether administration when he was in this country, and how highly he extolled ether as *the* anæsthetic, must feel some surprise at the number of deaths which have occurred lately in the States under the drug, and think that he has now somewhat modified his opinions. The history of the last fatal case is reported in the *Boston Journal*, under the heading of Cerebral Hæmorrhage, and Death following the Administration of Ether. A post-mortem examination of the patient, a woman, confirmed the opinion that cerebral hæmorrhage had ensued. The writer, Dr. Mathewson, states that his experience in this case will not deter him from using ether in preference to any other agent when anæsthesia is desirable, but will make him more careful in the examination of patients previous to operation, so as to dispense with it when there is reason to believe the bloodvessels are diseased or weakened.

Vieux Militaire.—We think our correspondent's case will be met by the New Regulations for granting a Degree at Durham. He should apply to the Dean for information.

Mr. L. Rudkin.—It has not yet appeared.

ANÆSTHESIA IN OPERATIONS ON THE EYE.

To the Editor of THE LANCET.

SIR,—I cannot concur in Mr. Hodges' suggestion as to the cause of the serious symptoms which arose in my case of bichloride inhalation. As mentioned in the manuscript, but omitted (I presume from want of space) in your printed report, the division of the internal rectus and optic nerve was the first step in the operation. There was no lack of hæmorrhage after this before symptoms of collapse appeared, and it is therefore clear that the shock from nerve-cutting was not the cause of the symptoms in this case.

Since reading Mr. Hodges' interesting communication, I have had an opportunity of testing the pulse in three cases of extirpation, and have found it entirely unaffected at the moment of division of the optic nerve; and although far from denying the possibility of such an occurrence, I may add that in hundreds of cases of extirpation of the eyeball which have come under my notice I have never seen collapse follow as an apparent consequence of division of the nerve, not even in cases where, for various reasons, I have been compelled to withhold anæsthetics altogether.

On the other hand, I have several times seen identical, though less serious, symptoms arise during the administration of bichloride of methylene. We all know that they are apt to occur as a direct consequence of the inhalation of this agent, and they have already proved fatal in three instances. Your obedient servant,

CHAS. BELL TAYLOR, M.D., &c.,
Honorary Surgeon to the Nottingham and
October, 1876. Midland Eye Infirmary.

M. PILLISCHER'S INTERNATIONAL MICROSCOPE.

IN our notice of the "International Microscope" constructed by M. Pillischer, we are informed we fell into an error in regard to the magnifying power of his instrument as compared with that of M. Hartnack's, Hartnack's No. 7 with No. 3 eye-piece magnifies 300 diameters; his No. 8 with No. 3 eye-piece, 400; whilst M. Pillischer's 1-7th with a No. 3 eye-piece gives 420 diameters—a clear difference in favour of M. Pillischer's instrument.

AN INSTITUTION FOR EPILEPTIC CHILDREN.

A CORRESPONDENT would like to know if there is an institution for epileptic children, who are troublesome, and cannot properly be cared for at home.

General Practitioner.—An American physician has, we think, recommended sweet spirits of nitre as the best vehicle for sulphate of quinine. An ounce of the spirit will dissolve two drachms of quinine, yielding a transparent solution.

Mr. C. K. Redmond.—If our correspondent will look over our back numbers he will find two or three papers on the subject.

LUXATION OF THE EXTERNAL EXTREMITY OF THE CLAVICLE.

To the Editor of THE LANCET.

SIR,—In last week's LANCET a report of luxation of the clavicle (external end) backwards over acromion is given, and it seems in France to be so rare as not to be mentioned in some of their works. In England, however, men fall about more, and the accident is common enough to have a diagram assigned to it in Erichsen's Surgery, sixth edition, vol. i., page 360. Within the last four months I have seen a case of it here, exactly as described by your correspondent, except that the elbow could be brought to the side without effort, and the only movement of the arm that was limited was abduction of humerus. He felt the arm "weak" when he was holding in horses in his vocation as driver.

The anatomy of the dislocation is interesting, as given by your correspondent. Mr. Erichsen does not explain how such dislocation is possible, and in several cases from University College Hospital the reduction seems to have been easy. In your correspondent's case and in my case the attempt to reduce was unsuccessful. Yours truly,

West Hartlepool, Oct. 17th, 1876. E. M. S.

Inquirens.—The less said about medicine the better, though we think a sound Judge would admit the power of recovering for such services; but the qualifications are ample for recovering for medical and surgical attendance.

Mr. W. J. Ready.—Such advertisements are neither common nor desirable, though we can imagine that in our correspondent's case the advertisement was inserted thoughtlessly, and without any intention of acting unprofessionally.

Polo, (Norwich.)—Yes; African exploration owes much to medical men. To say nothing of our own Mungo Park and Livingstone, Germans of medical antecedents are numerous among African travellers. The latest is Dr. Ermin von Bary, of Munich, sometime body-physician to Princess Schwarzburg-Sondershausen, and, more lately, medical practitioner in Malta, who started last August from Tripoli, and is now in Ghât. The object of his expedition, which is subsidised by the Berlin Geographical Society, is the solution of geological questions on the antiquity of the Sahara, and observations on the flora of the Hogar mountains.

Beverly.—Consult any surgeon.

A TRUSS FOR IMBECILE PATIENTS WANTED.

To the Editor of THE LANCET.

SIR,—I have an imbecile patient, on whom three weeks ago I successfully performed the operation for strangulated scrotal hernia. I am obliged to have the man constantly in bed and constantly watched, so as to prevent him leaving the recumbent position, an event which would inevitably lead to the rupture's re-descent, and probably also to the necessity for a repeated operation. Before the appearance of any bad symptoms it was attempted, though quite uselessly, to make the patient wear a truss, and this means of security is likely to prove as inadequate as ever. Can you or any reader of your journal, who may have had experience in this direction, tell me of some appliance suited for permanent use, and which, whilst keeping up the bowel, could remain on the patient's person both night and day? I am not aware that mechanical ingenuity has devised anything of this sort; but I should feel much obliged for any information or any hints that would be likely to prove of service. Whilst operating I had several times to desist in consequence of the patient, whose heart is fatty, presenting sudden symptoms of impending dissolution, and my anxiety to obviate any cause for further operative interference will thus be readily understood.

Your obedient servant,
N. G. MERCER, M.D., Superintendent.

East Riding Asylum, Beverley, Oct. 14th, 1876.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Thorowgood; Dr. J. B. Yeo, London; Dr. Burdon-Sanderson; Mr. S. Gamgee, Birmingham; Dr. B. W. Richardson; Mr. Tamplin, London; Dr. Hamerton; Mr. Fry; Dr. Paul, Glastonbury; Mr. Webb; Mr. Sharp; Dr. Brett, Watford; Dr. Williams, Norwich; Mr. Bailey; Dr. Maclagan, Dundee; Dr. Fergus, Moy; Dr. Chambers; Dr. Taylor, Nottingham; Mr. Moreton, Chester; Dr. Eaton, Clenton; Dr. Mercer, Beverley; Dr. Nicholas, Wandsworth; Dr. Wade, Warwick; Mr. Beaufort, Oxford; Mr. Munson, Orkney; Mr. Potts; Mr. Payne, London; Mr. Carpenter, London; Mr. Topham, London; Mr. Wodsworth, Dublin; Mr. Harrison, Liverpool; Mr. Gilrath, Edinburgh; Mr. Hodges, Leicester; Mr. Radkin, London; Mr. Thomas, Birmingham; Messrs. Phillips and Son, Newtown; Mr. Stevens, Stoke Newington; Mr. Crumpton, Shrewsbury; Messrs. Johnson, Clark, and Co., London; Dr. Edis, London; Mr. Ingpen, London; Mr. Fisher, London; Mr. Snell, Sheffield; Dr. Tanner, Newington; Dr. Tuckwell, Oxford; Mr. Saunders, Cambridge; Mr. Benton, Highgate; Messrs. Baillière, Tindall, and Cox, London; Mr. Bass, Evesham; Dr. Hooper, London; Mr. Wilson, London; Mr. Renton, Glasgow; Dr. Wilkinson, Holloway; Dr. Crombie, West Brompton; Mr. Roberts, Denbigh; Dr. MacGown, Millport; Mr. Hume Rothery, Cheltenham; Mr. Hobley, Southampton; Mr. Proger, Hitchin; Dr. Esler, Belfast; Mr. F. G. Brown, London; Mr. Keates, London; The Dean of the Charing-cross Hospital School; J. W.; X., Sheffield; Medicus, Gateshead; E. M. S.; H. W. C.; Carte; Inquirens; The Committee of the London Hospital Medical Society; A Liberal M.D.; Progress; Vieux Militaire; M.R.C.S.; A. Z., Haversham; Iota; W. J. M.; Esplanade; Query; Alpha; An Observer; Beverley; Clyde; Frank; Foreign Student; The Secretary of the Royal College of Surgeons of Edinburgh; The Secretary of the Norwich Hospital; R. W.; M.D.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. G. Lawson, London; Dr. Huntley, Brighton; Mr. Shaw, Attercliffe; Mr. Sowter, Upper Norwood; Messrs. M'Gee and Co., Belfast; Mr. Fawcett, Taunton; Sir James Walker, Hillmore; Mr. Wylie, Belfast; Messrs. Oliver and Boyd, Edinburgh; Dr. Harding, Whittlesea; Messrs. Kinmond and Co., Leamington; Mr. Erskine; Dr. Davies, Ebbw Vale; Mr. S. Johnson, Dalton-in-Furness; Mr. A. H. Jones; Mr. Brown, Halstead; Dr. Freke, Cork; Mr. Meehan; Mr. Wolverson, Alfreton; Dr. Burman, Devizes; Mr. Hall, Wigan; Dr. Davey, Walmer; Dr. Fox, Bristol; Dr. Smith, Taunton; Messrs. Daniel, Norwich; Mr. Edge; Dr. Moffat, Hawarden; Dr. Brady, Derby; Dr. Eberle, Easingwold; Medicus, Oxford; Graduate, London; M.D., Hertford; S. M. H.; M.D., Tarbert; Surgeon; M.D., Brownhills; H. B. S., Bradford; Medicus, Wednesbury; Alpha, Bath; J. W., Oldbury; M. B., Winchelsea; R. F., Manchester; W., Wigan; Medicus, Ironbridge; Partnership, Exeter; H. M. S.; A. R. G.; M.D., Adelphi; F. S., Great Grimsby; M.D., Nottingham; C. J., Abingdon; Medicus, Nottingham; D. H., Hereford; C. A., Huddersfield; Myxoma; J. A. F.; Delta, Dorchester; Medicus, Sheerness; W. S.; A. W.

Western Morning News, Local Government Chronicle, Welshman, Bradford Daily Telegraph, Lincolnshire Chronicle, Manchester Guardian, Liverpool Post, Cork Constitution, Glasgow Herald, Leeds Mercury, Metropolitan, Tiverton Gazette, Surrey Advertiser, North British Daily Mail, Carlisle Journal, East London Observer, Newcastle Chronicle, Brighton Examiner, Islington Gazette, Northampton Herald, St. Pancras Gazette, and *Preston Guardian* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, OCT. 19TH, 1876.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Oct. 13	29·39	S.W.	59	61	...	64	54	0·36	Bright
" 14	29·71	S.W.	55	57	...	61	51	0·03	Cloudy
" 15	29·95	S.W.	55	60	...	64	45	0·13	Cloudy
" 16	29·78	S.E.	51	53	...	63	46	...	Foggy
" 17	29·71	S.	57	59	...	70	51	...	Overcast
" 18	29·69	E.	54	55	...	69	54	...	Foggy
" 19	29·79	E.	54	55	...	67	53	...	Fine

Medical Diary for the ensuing Week.

Monday, Oct. 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Sansom, "On two Cases of Croup and Diphtheria." — Mr. C. F. Maunder: Cases which have been subjected to Subcutaneous Osteotomy.—Mr. Richard Davy, "On Degenerative Cysts on Muscles."

Tuesday, Oct. 24.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY. — 8½ P.M. Dr. W. Miller Ord, "On a Case of Pseudo-hypertrophic Paralysis, and on Surface Temperature." — Sir B. C. Brodie, "On the Use of the Magnet in the Detection of a Needle broken in the Leg."

Wednesday, Oct. 25.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH (Town Hall, Selby).—2 P.M. Discussion on a paper read by Mr. E. B. Hicks at last meeting, "On Sanitary Reform from a Rural point of view."—Dr. T. Britton: "The History of an Outbreak of Enteric Fever."—Mr. G. Goldie: "What has Sanitation done for the Promotion of Public Health and Prevention of Disease in Leeds during the past decade?"—Dr. H. F. Parsons, "On the Reduction of Mortality as effected by Sanitary Improvements in Selby."

HUNTERIAN SOCIETY.—8 P.M. Mr. Stevens will exhibit an Abnormal Fœtal Heart.—Mr. Barrett, "On Dental Septicæmia."

Thursday, Oct. 26.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Oct. 27.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

QUEKETT MICROSCOPICAL CLUB.—8 P.M. Ordinary Meeting.

CLINICAL SOCIETY OF LONDON. — 8½ P.M. Dr. Daly and Mr. Maunder, "On a Fatal Case of Gall-stone."—Dr. Cayley, "On a Case of Empyema in which washing out the Pleural Cavity was followed by Convulsions and Death."—Dr. Gowers, "On a Case of Lymphatic Leucocythæmia treated by Phosphorus." — Dr. Theodore Williams: Sequel of a "Case of Contracted Cavity in the Lung," communicated in 1871.

Saturday, Oct. 28.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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